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STUDIES IN HONOUR OF
HAROLD ORTON

on the occasion of his
Seventieth Birthday

Edited by
STANLEY ELLIS

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Harold Orton

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EDITORIAL NOTE

Leeds Studies in English (1968) is presented to Emeritus Professor Harold Orton in honour of his seventieth birthday, on 23rd October, 1968. The contributors are only a few of those who wished to honour him in this volume. It is unfortunate that the presentation of complex maps and the use of phonetic symbols has been only one of the complications that have regrettably delayed publication, but it is hoped that the eventual appearance of this birthday present compensates for its lateness.

Preparation of the volume has been greatly assisted by help from Dr. Wolfgang Viereck, whose painstaking checking of proofs has been invaluable.

S.E.

University of Leeds,
September 1969.

HAROLD ORTON: A BIOGRAPHICAL NOTE

By STANLEY ELLIS

Emeritus Professor Harold Orton is not regarded by any of his friends as retired. The freedom he gained on retirement from the onerous cares of departmental administration and the University governing bodies on which he served has given him time to do more of what he regards as real work. His dedication to the study of English dialects and his application to the wider field of dialectology have been lifelong. His reassurance to generations of students that their academic interest in dialect would give them "a hobby for life" has been witnessed in his own experience. Dialect has indeed been his hobby, but a hobby pursued with a wholeheartedness and enthusiasm that have resulted in a tremendous contribution to the knowledge of his chosen subject. In his book on Byers Green dialect the scholarly chapters do not overshadow the practical reality of his fieldwork on the touchlines of the football field of his native village. His father was the schoolmaster of Byers Green, near Bishop Auckland, County Durham, and in the language of the mining community there existed an enormous body of material worthy of investigation. In his boyhood, Harold was a keen footballer and has been known to claim enough ability to have become a professional. Indeed, his interest in the results of the professional game is still a keen one.

Bishop Auckland Grammar School was the scene of more than football triumphs, however, and as a young undergraduate of less than military age he was able to begin his university studies at Hatfield College, University of Durham. The first world war called him when in 1917 he joined the Durham Light Infantry and became an Army Officer, went to France and in 1918 was severely wounded. In 1919 he was invalided from the Army and whilst still under treatment resumed his studies at Merton College, Oxford.

His war wounds were the end of his football-playing career. He declined to permit the amputation of his shattered right arm which the doctors had recommended, and his achievement in defeating the disability has been a tribute to his fierce determination. Oxford associates remember him in his undergraduate days with his arm in a high splint, and Mrs Elizabeth Mary Wright, 35 years later, was to remember and comment on his courageous attitude towards the necessary change to left-handed living.

At Oxford he met Joseph Wright and Henry Cecil Wyld and it was his association with the latter that influenced his work on the history of the English language and prompted his keen interest in the field of "occasional spellings" and in the work of the seventeenth-century grammarians. He was awarded a University Research Scholarship in Philology and took his B.Litt. at Oxford in 1923. From 1924 to 1928 he was Lektor in English at the University of Uppsala, Sweden. His experience in the atmosphere of that great Scandinavian University strengthened the incisiveness of his researching mind and gave him a further impetus towards his eventual work on the investigation of living dialect. His interest in Medieval Literature was also active, however and in 1939 he published with W. L. Renwick his work on *The Beginnings of English Literature to Skelton,* a work which has recently been revised and republished.

On his appointment to Armstrong College, Newcastle (later King's College of the University of Durham and now the University of Newcastle) he began his survey of Northumbrian dialects which might be regarded as the basic preparation for his work on the *Survey of English Dialects.* Living in Newcastle he was able to meet women from the small communities to the North of the Tyne who came into the city hawking fish, and here again contacts were established which gave a further opportunity for the fieldwork on which he was so keen.

He left Newcastle for Sheffield at the outbreak of the second world war and his graphic description of his arrival in Sheffield in the blackout in September 1939 is one to be treasured. He remained Lecturer in charge of the Department of English Language at Sheffield from 1939 to 1946 but his wartime secondment to the British Council, as Deputy Director of Education from 1942 and as Acting Director from 1944, meant that he was necessarily less able to take part in university affairs. His experience of British Council administration was to stand him in good stead later when he served on university committees in his professorial capacity. He had not allowed his war wound to prevent his being recommissioned in the Territorial Army in 1940, and in 1945-6 he was Commanding Officer of the Sheffield University Senior Training Corps.

He was fond of reminding his students of his period of activity as a Consultant Member of the B.B.C.'s Advisory Committee on Spoken English from 1934 to 1940, and his discussion of the pronunciation of standard English was always enlivened by his memories of B.B.C.

experience. His own spoken English retained no sign of the Durham accent that he has always been able to resume at will, though it must be said that under great provocation there have been moments when traces of the syntax and phonology of his boyhood companions have appeared.

Although first a dialectologist, Harold's contribution to the wider field of philology has been considerable. The knowledge he passed on to students and his publications relating to sound change and development were often enlivened by reference to dialectal information.

Dialectal research was necessarily restricted by his activities in other fields from 1939 to 1945, but he had noted the publication of the *Linguistic Atlas of New England,* and his own ambition to investigate English dialects in a comprehensive manner in order to produce a Linguistic Atlas of England was not dormant. He had been concerned in the mid-1930's with Professor Horn of Berlin University, Professor Kurath (then at Brown University) and others in discussions about such an Atlas, but these talks had brought no progress. Immediately after the end of the war the resumption of contact with his old friend Eugen Dieth produced a preliminary plan for collection of materials for a Linguistic Survey of England. Money for any research task was scarce, even non-existent, in England in 1945 and the Philological Society's interest in a Dialectal Survey was limited by financial stringency.

When Harold moved to the chair of English Language and Medieval English Literature at Leeds in 1946 the moment for action had come. He and Eugen Dieth spent the next few summers in preparing various versions of a Questionnaire eventually published in 1952. This chapter of his life has been fairly well documented in his own writings in the *Leeds Magazine,* in the *Transactions* of the Yorkshire Dialect Society, and in articles written with Eugen Dieth. We have a brief description in his *Introduction* to the *Survey of English Dialects* of the preparation of the questionnaire, but the more human side of the period is preserved in the minds of those who worked with him then and later. The phrase "yawn and bash on" which came out of those hot days spent in the basement of the Brotherton Library is a famous one for later generations of his students.

Dr Fritz Rohrer and Dr Peter Wright give some idea in this volume of the early days of the Survey's work.

Teaching undergraduates was always a pleasure to Harold. "We will play some linguistic games today" was often his introduction to a session that proved to be nothing short of sheer hard work—exhausting, provocative, and therefore stimulating. It is his capacity for stimulating others, his undivided purpose, his "single eye" as he himself puts it, which are the outstanding features remembered with affection and considerable awe by his Leeds students. Undergraduate and postgraduate students were inspired by his energy and enthusiasm in dialect studies. Monographs at both first and second degree levels were turned out in great numbers during his teaching career at Leeds. These are almost invariably authoritative presentations of the dialectal situation in communities all over England, fashioned to a similar plan, and therefore comparable. During term time he could spare little time during the day for appearances in the "Dialect Room." Dr Halliday, his co-editor on the northern volume of the *Survey of English Dialects*, worked alone, but by no means anonymously, and everyone connected with the Department was very conscious of what work was going on. Once office hours had ended, Harold would take up his pen at his dialect desk and continue with his own editorial task.

During these years his work as joint Editor of the Yorkshire Dialect Society's *Transactions,* his editorship of *Leeds Studies in English,* his work with the Yorkshire Society for Celtic Studies and the Leeds Philosophical and Literary Society, as well as his membership of many other learned societies took up a great deal of his time and energy. He was forever campaigning through all these bodies to get help for the Survey. Financially he had to operate on a shoe-string. The University was unable to give him all the money he needed during those years of financial stringency. He gained help from private individuals, ranging from cash donations to the gift of motorized transport for fieldworkers. Fees from broadcasts and lectures were waived in favour of donations to the University Dialect Research Fund, which he brought into being.

Adviser, cajoler, pressurizer (all these he had to be), father confessor to his fieldworkers, male and female, encourager of those who faltered, he was at the same time able to devote time to his passion for gardening and for house-heating—he was an early exponent of house insulation and the benefits of double-glazing. He had the devoted support of his wife, Joan, and during those hard-working years saw Betty, his daughter, graduate at Oxford and take a higher degree at Leeds.

With the triumph of the publication of the first part of the *Survey of English Dialects* in 1962, brought about by his personal contact with the Leeds publishers, E. J. Arnold and Sons, he continued to assert the need for a programme to complete the publication of the basic material and to continue the exploitation of the enormous collection of materials in the archives of the Survey. The University's generosity to the very limit of available resources served to cover the costs of publication even after Harold's retirement, and by 1970 all four basic volumes of the Survey material should be in print.

Harold's retirement in 1964 meant that he could at last accept the pressing invitations from American universities he had previously had to refuse. In 1954 he had been visiting lecturer at a summer session in Michigan. In 1965 he visited Kansas and Michigan, in 1966 Iowa, and in 1967 and 1968 Kansas again. Meanwhile the publication programme of the *Survey of English Dialects* volumes has continued actively under his direction, and his annual six-month stay in the United States seems to be a rejuvenating factor. He returns to England with renewed vision for future activity. His most recent honour, the award of an Honorary Ph.D. at Uppsala, is a tribute from a wide circle of Scandinavian friends. Typically, Harold himself regards the honour as one conferred on the leader of a team. Further trips as Visiting Professor to American Universities seem to be the likely pattern for him, but work on dialectal matters will never be allowed to flag and the Atlantic commuting that has made him personally known to a wider body of students will no doubt continue to be taken in his stride.

When Harold retired from the Chair of English Language and Medieval English Literature at the University of Leeds, many of his students wrote to me to enquire if any testimonial was being devised to commemorate his years of devotion to their welfare. Harold had made it known for many years that he felt little sympathy for testimonial funds and was adamant that none should be made for him. A Festschrift such as this one, prepared for him by his academic colleagues and read by his admirers, is perhaps the best possible tribute that we can offer him.

EARLY WORK FOR THE SURVEY OF ENGLISH DIALECTS: THE ACADEMIC AND HUMAN SIDES

By PETER WRIGHT and FRITZ ROHRER

The pleasant task is allotted us of recalling early days with the English Dialect Survey in the years 1949 to 1952. When we began our respective duties as research assistant to Leeds University and research student from the University of Zürich, little did we realize what an entirely new and wonderful world would be disclosed to us in the near future. Nor was our first connexion with it at all exciting. One of our earliest impressions was a glimpse of Professor Eugen Dieth of Zürich toiling page by page, notion by notion, through the six volumes of the *English Dialect Dictionary* in the dimly-lit basement of the Brotherton Library. Such work, which was typical of Professor Dieth's methodical and thorough approach, is an essential preliminary to questionnaire-making, as one of us has recently found in making much shorter investigations of city dialects and various industries; but it is soon counterbalanced by field work, dealing with linguistic problems as they arise and develop in life, not as mummified in a dictionary.

The investigation, primarily to trace and pin-point as accurately as possible modern dialect-boundaries in England, had many subsidiary aims, each fascinating in its own right. There were the phonetic and phonemic angles, the "history of English sounds" approach, the lexical one, and the semantic. Much was to come to light, too, in those little-explored fields of English dialect—intonation, stress, and especially syntax.

In July, 1949, assembled the first dialect-hunting team, consisting of Professors Orton and Dieth, and ourselves. As with most projects, establishing efficient work-methods was to prove the hardest part; and for a "blitz" attack on many dialects, as was envisaged, all depended on a suitable questionnaire. For this reason July saw us installed in a downstairs room of now-demolished English Language House in Virginia Road, Leeds, making and improving drafts of the questionnaire. These sittings were not without their more humorous side, although this was not apparent at the time. We would often find, when team members grew tired and circular arguments developed, that a ten-minute pause and a cup of tea worked wonders. Once a thunderstorm broke overhead and, unknown to us, water penetrated the floor above. A trickle appeared down a light fitting, suddenly turning into a flood and cascading onto the reference works on the table beneath. While some of his team stared in astonishment, Harold Orton, with great presence of mind, leapt into action, rescuing the books from a watery fate.

For experiments with the early drafts of the questionnaire, the team stayed five days or so in each of seven places, namely: Hawes in Wensleydale; Marshside, an old shrimping-village but now a suburb of Marshside, Lancs.; Tideswell in remote North-West Derbyshire; Alford, Lincolnshire; Solihull, Warwickshire; and Cullompton, Devon. Some of these places were chosen because team members already had contacts there. When we arrived in a new area, our first aim was to contact the schoolmaster or vicar or anyone else who might put us onto some old native dialect-speaker willing to help. We eventually chose about four in each locality, descending on them sometimes as a quartet, sometimes in pairs.

Naturally the characteristics of each team member soon appeared, such as Eugen Dieth's dogged perseverence and love of walking. With informants and team members alike, Harold Orton had to use a good deal of tact. One member was well known for his well-intentioned obstinacy; English conditions were rather strange to the Swiss questioners; and each team member had his assets and liabilities. Through it all stood Harold's ease of conversation and his ability to draw out the broadest vernacular from the most unlettered informant. The response was remarkable: when a man realizes that the details of his occupation are of vital interest to his questioner, he does open up. Whether it was a shepherd after a domino game in a daleside "pub," a farmer around his pigsties or the housewife in her kitchen, the informant almost invariably became as enthusiastic as the interviewers.

Outstanding, too, was our leader's talent for being so often right. Confronted at Muker in the North Riding with having to sleep in an unaired bed, he inserted newspapers between the sheets with complete success; whereas in the next bed his research assistant, who would not, awoke with a streaming cold. To take a more important matter, in those far-off days we never fully understood why Harold Orton in his dialect questioning probed so much, not only for pronunciations and words, but for their exact meanings. Why, we wondered, should he keep going to immense trouble to ascertain the names and functions of the smallest parts of a farm-cart? But he was undoubtedly right, because the inexperienced fieldworker's worst linguistic difficulty is probably not extracting old words and pronunciations, but checking that answers mean what he thinks they mean. Furthermore, as time went on, we learnt more and more the value of his method of not taking the first willing local speaker, but of careful inquiry first to find the best available. Also it must be evident that to initiate and carry through a project of this magnitude demands not only enthusiasm but courage.

A provisional network was drawn up of over three hundred villages which had had reasonably stable populations, and which were separated from each other by hills, marshes, wide rivers, old political boundaries, or just fifteen or so straight miles. To aid the plotting of dialect visits, a large wall-map was ordered, but for some time nothing further was heard of this. It was eventually rescued from the English Literature department (where its wrong delivery must have created something of a puzzle), decorated with flags and put to good use. Nowadays it hangs, as splendidly as ever, in the Leeds Institute of Dialect and Folk Life Studies.

Until May, 1950, when petrol came off the ration, we had no car; but train, bus, and our legs carried us wherever required without undue trouble. Accommodation varied from a large but far-too-expensive hotel, which we dared stay in only one night, to many comfortable boarding-houses and private homes, bedrooms in Cumberland and Hampshire that were more like cupboards, and a cottage with the most primitive sanitation. Although village secrets were often confided to us, we were careful not to divulge them, as this would have weakened our standing in a village. Likewise we hastened to explain that we were not from the B.B.C. or the newspapers, in case this might scare our helpers (some of them rejoiced in publicity but many more took an opposite view).

In the earliest searches we lacked the use of a tape-recorder, and had to keep our hearing as sharp as possible by comparing notes and by other methods like listening to Daniel Jones's records of the cardinal vowels. However, the chief aim at this stage was testing the questionnaire, so that the absence of mechanical recording apparatus was no catastrophe.

Interviews were normally conducted in the quiet of an informant's home, where he was likely to feel most at ease, but they also took place wherever opportunity presented itself. Two of the oddest interviewing places we recall are what turned out to be an ant-heap beside a Devon hayrick, where Eugen Dieth and a younger colleague questioned an unco-operative farmer with only moderate success; and a very public interview in a Yorkshire town council chamber, with one of us on the rostrum and informants gathered in a semi-circle in the large hall below.

One of us has been teased for working an informant past midnight;

and for eating a substantial village tea (at which he collected dialect and also had his fortune professionally told) and then refusing to cancel a hotel dinner which fell due half-an-hour later. But he could retaliate with the story of how, sent to check an extraordinary Yorkshire pronunciation of [fɩəl] for "foal," he found only [fωəl] for the animal, the [fɩəl] having apparently arisen when the previous researcher had, for some minor error, been called a fool. Incidentally, no-one, so far as we could judge, ever invented a pronunciation to spite us. For example, the Lancashire pronunciation [ɩuəʴ] "hair"[1] was a genuine, though queer, one, the speaker having no desire to complicate results for future generations of linguistic analysts.

After each dialect hunt the team would return to headquarters, discard a few useless questions, reframe many others and insert additional ones. Reframing questions was particularly important because it is so easy by using a certain word to influence an answer. Thus, if you ask "What do you call a coat?," an informant may well reply *coat* even if he normally uses the word *jacket*; and, if a question runs "After a meal, when you remove the things, what do you say you do?," this might suggest *side the things* rather than *side up, side away, side the table,* etc. It was and remains a difficult problem, but time spent revising the questionnaire saved much semantic trouble later on.

To Harold, indirectly, we owed some strange experiences, sometimes embarrassing, sometimes humorous. A member of the original dialect team arrived at one remote farmhouse on the Yorkshire moors and tried to explain his mission to the deaf old lady who opened her door at his knock. Catching his request for "help," she told him to wait a moment and disappeared—returning to press a shilling into his hand! However, she proved to be an excellent dialect speaker, and the visit ended with a cup of tea and a good laugh. Other early experiences included the time when, after a researcher had asked about *snecks, hasps* and other door-fastenings, and had gone round the house drawing them, its lady occupant, thinking—not unreasonably—that he would effect a burglary that night, called in the neighbours, who "grilled" him thoroughly before allowing him to depart. There was also a "gun-running" episode, when a Yorkshire hill-farmer, thinking that his questioner wanted old objects as well as older language, insisted on giving him an ancient gun. As he would take no refusal, polite or blunt, the researcher intended throwing the weapon into a ditch on the way back to base; but he forgot, a horrified maid saw it, and informed the police . . . .

Linguistically, too, these dialect hunts sometimes brought remarkable results confirming the reliability of other dialectologists. There was, for example, the frequent absence of the definite article in the East Riding, especially around Patrington.[2] Secondly, proof was found of the late survival of [ç] on part of the Pennines for the sound now extinct in Standard English but represented by the spelling *gh*. Professor Orton had mentioned that the sound had been heard some years before near Todmorden, and then in 1950 at Heptonstall, not far away, the Dialect Survey found it preserved in *night* and *light*.[3]

Still more remarkable was the survival of "utch." Professors Orton and Dieth, wishing to make the best possible use of their fieldworker (Peter Wright) in his last months as research assistant, sent him on an extended Southern tour to investigate five places in and near London, Hampshire, Herefordshire and Somerset. Vivid memories remain of that tour (e.g. the almshouses in South Hackney where by mistake the tape-recorder was plugged into D.C. current). Out of curiosity the fieldworker chose in Somerset the Merriot area just west of Montacute, called by A. J. Ellis in 1890 the "Land of Utch." Here it had been claimed there survived an "utch" from ME *ych*,[4] the same word that appears in rustic speech in Shakespeare's *King Lear*.[5] Scepticism about being able to find it after so long disappeared when on this tour, in June, 1952, it was recorded, as [ɩtʃ], two or three times on tape in incidental conversation from a farmer only in his forties. Although he did not seem to realize what he had said, his relatives who were present did. These days it seems only too common to decry Ellis's results—probably because his hieroglyphics are difficult to understand —but there is no doubt that Ellis was a most accurate phonetician.

Besides the scientific and humorous aspects of our work, there was a deeper human side. We found the most inspiring wealth, not only of spoken dialect but of different types of people. Out in the country, we realized that we were treading on different ground altogether from that in the towns. Whether we talked to the harsh Lancashire shrimper on the West coast or a rough village blacksmith inland, a talkative Devon farmer in his heavily-laden orchards or a quieter Dales stonemason on the bleak moors, a weather-beaten Cumbrian shepherd on the hills or an elderly housewife in her parlour—it made no essential difference. These folk, wherever they lived and whatever walks of life they came from, had one thing in common: they had arrived at a simple philosophy of life through hard work and humble living. Lack of schooling was made up through experience—a hard master! Yet there was scarcely one amongst these people who grumbled about the social conditions of the old days. "Hard work never killed anyone" was one of their favourite sayings and, judging from their health and good looks, they were right. They almost bubbled over when they dug into the memories of days gone by. There was a refreshing frankness and warm hospitality about them.

When we got down to asking them questions, we were again and again impressed by their quick mental reactions and extensive knowledge of their particular work. Many of the informants had taken an active part in village life, such as it was; what did it matter what it was so long as they put their hearts and souls into it? They had all seen a great many social and political changes, and not all of them to the good of mankind. That was their opinion anyway!

It would have been hard to keep discussions away from the problem of the rising generation, and our informants' remarks were not always flattering to the youngsters. More than once we felt rather uncomfortable and began to doubt the blessings of the modern welfare-state, especially when we witnessed the peace and happiness of these old people whose eyes and minds had been sharpened by adverse circumstances, but who never gave in. A genuine and immediate faith made them live lives which, after 60, 70 or 80 years, were still full of joy. Relatively untouched by the complicated problems of modern civilisation, they found delight in the small things which are apt to be overlooked. "If you do right when only a trifle is at stake, you can leave the big problems to take care of themselves." This was, in a nutshell, the essence of their philosophy.

Our dialect hunts often took us into the houses of lame or blind people, and even there we came across the same healthy spirit. These people had no time to complain of their own fate—they knew others who had suffered even more than they. One blind man interviewed was in the highest of spirits and declared that, although blindness had overtaken him some years ago, he thanked God for a wonderful life and for memories of bygone days which were vivid and strong enough to let him see light in the surrounding darkness. To men like him, our visits were almost a godsend. They were most anxious to help, and at the same time the dialect-quiz provided them with an unexpected but welcome entertainment. They helped and got satisfaction out of helping. When the interviewer said good-bye to one of these men, his informant wished him well and said, "I'm sorry I can't see you, but I like your voice and your homely way of speaking . . . ." That was the only moment when a touch of sorrow crept into his voice.

These, then, were some of the impressions gathered during dialect hunts, proving that our work was much more than a mere pursuit of linguistic and philological phenomena. It enabled us to see more of the English countryside, to know better both town and country folk, and to appreciate better their background, customs, and ways of living. It was a rewarding experience travelling up and down the country. To our former leader on these dialect expeditions, and to all those good people who so patiently answered our extraordinary questions, we should like to offer heartfelt thanks.

NOTES

[1] See *Survey of English Dialects*, Vol. I, Part II (Leeds, 1962), p. 592, *sub* Lancashire, place 7.

[2] *Ibid.*, Vol. I, Pt. II, pp. 484, 515, 557, 559, 634, 646, 693, *sub* Yorkshire, place 28; and Vol. I, Part III (Leeds, 1963), pp. 840, 991.

[3] *Ibid.*, Vol. I, Part II, p. 484, *sub* Yorkshire, place 21.

[4] See A. J. Ellis, *English Dialects—their Sounds and Homes*, pp. 25, 29.

[5] Preserved by Shakespeare in *chil* "I will" in *King Lear*, IV, vi.

THE FUTURE OF ENGLISH DIALECT STUDIES

By G. L. BROOK

The most valuable kind of research is that which opens up new fields for future investigators. It therefore occurred to me that in a volume of studies presented to Harold Orton, room might be found for an article discussing the direction that English dialect studies might take after the completion of the Survey of English Dialects.

The first necessity is to complete the publication of the material brought together by the Survey, both in the volumes of basic material and in a dialect atlas. The speed with which one volume of Basic Material is following another is welcome evidence that this important part of the work is not likely to be neglected.

One task that needs to be undertaken will not become clear until most of the material of the Survey is published. This is the selection of certain areas in various parts of the country for a closer survey. The areas that are most likely to yield interesting results are the borders between different dialect areas, where a number of isoglosses appear to be bunched together. Investigation of such areas may make it possible to delineate dialect boundaries more exactly. If it should be found that greater precision is not possible, that very discovery will be a useful one. An investigation of border areas will yield a good deal of information about the nature of dialect boundaries. To indicate the boundary between two dialects by a line on a map is always an over-simplification; a belt where the forms characteristic of both dialects will be found is likely to be nearer to the truth. The study of border regions can indicate the varying width of such a belt. It can indicate which of two conflicting forms is, in Mendelian terms, dominant and which recessive, and it can suggest reasons for the facts that emerge.

One result of such an investigation will be to show how complicated is the dialectal situation in most parts of England today. The exact localization of a dialect speaker on the basis of an utterance of a few words has always appealed to the lay mind, and popular interest in dialect often takes the form of inviting anyone who has written on the subject to take part in a sort of parlour game to imitate the success of Professor Higgins of *Pygmalion* in such identification. Such localization is becoming increasingly difficult, but I do not think that the difficulty should be regarded with despair by anyone who proposes to devote his life to the study of English dialects; it should rather be regarded as a challenge, which adds to the difficulty, but also to the interest, of dialect study.

During the last few decades there has been a shift of interest in linguistic studies from diachronic to synchronic study. The time has come when we should no longer reject informants on the grounds that they do not speak a "pure" dialect. Most dialect speakers today are bilingual or multilingual. We should now try to distinguish the various strands that make up the complicated pattern in the dialect of such speakers, and, in doing so, we should make use of the work of the pioneers who have written monographs on the dialect of particular villages. Of course, when we have studied the speech of an informant with a complicated history, we must not claim that we have made a study of the dialect of the place where he happens to live; we shall have studied an idiolect, and it is to be hoped that from a series of such studies of idiolects, general patterns will emerge that will throw light on the speech-habits of multilingual speakers.

The Survey of English Dialects was chiefly concerned with the speech of farmers of the age of sixty or more,[1] and there were good reasons for this approach. When the study of English dialects was revived in the nineteenth century, one of the most telling arguments to enlist support took the form of saying that in a few years it would be too late to study the older forms of English rural dialects because improved communications and other influences were rapidly reducing the number of dialect speakers. Since that time the standardizing influences have become stronger, and there is no doubt that every year that passes reduces the number of reliable informants whose speech can most easily be traced back to Middle English. We have reason to be grateful for a survey that preserves many samples of such dialects, but it is well to remember that the older rural dialects are not the only forms of speech that are worthy of study. Helge Kökeritz, in his *The Phonology of the Suffolk Dialect* (1932) chose an area under strong outside influence from London and he made it clear that he was concerned with the dialect as a whole:

> My intention has been to paint a true and faithful picture of the Suffolk dialect as now spoken, not to give an idealized and beautifully retouched photograph of the speech habits of very old people to the exclusion of those of the younger generation.
>
> (p. xiii)

The process of change from the older to the newer forms of dialect is itself a worth-while subject of study. How far is it possible to detect differences between the speech of older and younger members of the same community? The differences are not merely in pronunciation. How often have we heard an argument between people of different ages end with the despairing words "It's no use. We just don't speak the same language."

Once we get away from the idea that the only dialects worthy of serious study are those spoken by elderly country-dwellers, town dialects can begin to come into their own. Such dialects have in the past been neglected, largely, no doubt, because of the difficulties that they present and because they throw less light than do country dialects on the history of the English language.

The chief problem in the study of town dialects is their lack of homogeneity. Speakers of many different country dialects move into the same town, and the preservation of native dialects is less likely to be encouraged or tolerated. Dialect workers in the past have gone out of their way to choose informants whose speech was consistent, although such speakers form only a minute proportion of the population of the country as a whole. Perhaps the time has come when we should brace ourselves to study the language of those whose speech is inconsistent. Linguistic variations in towns depend on occupation or social class rather than on place of birth, and the study of town dialects is likely to develop side by side with the study of class dialects.

Different methods of investigation are appropriate to different aspects of dialect study. In the nineteenth century, when interest was mainly directed to vocabulary, postal questionnaires could be used, since the task of reporting whether a particular word was in use in a particular place does not call for a very high level of technical competence. The authors of dialect monographs published during the present century have been chiefly concerned with phonology, and for such investigations trained field-workers, able to distinguish subtle variations of pronunciation, are essential. The branches of study that have been neglected are those that cannot easily be studied by means of a questionnaire: syntax, intonation, and idiom. These may be expected to engage more attention in future, and the most valuable tool for their study will be the tape-recording machine.

Now that some of the more urgent tasks of English dialectology have been achieved, we have the opportunity to turn again to some of the tasks that engaged the attention of the pioneers of English dialect studies in the hope of revising their work. Joseph Wright's *English Dialect Dictionary* (1898-1905) was an outstanding achievement, but inevitably workers in more specialized fields have discovered supplementary material. The book was out of print for many years. The unrevised reprint of 1962 is better than nothing, but a thoroughly revised edition would be better still. The *English Dialect Grammar* (1905) is a less satisfactory work than the *Dictionary*, and it could with advantage be replaced by an entirely new work, making use of the material recorded in the Survey of English Dialects.

One activity that should be encouraged is the closing of the gap between those who speak dialects and those who study them. Dialect societies can do much to close the gap, but among the members of dialect societies it is possible to distinguish the two groups, who do not always mix very well. Advocates of the use of dialect often plead with speakers of standard English for tolerance of the various non-standard English dialects; it is sometimes necessary to plead with dialect speakers to be tolerant of the use of standard English. Dialect societies have sometimes lost members indignant because the proceedings were not conducted throughout in dialect, and speakers of one of the dialects of Yorkshire or Lancashire have been known to pour scorn on other dialects of those counties on the grounds that they were not "proper dialect."

Preservation of dialects is not a satisfactory substitute for their study, but it is a useful aid to such study. Much has already been done, not least at Leeds, where the co-operation of the B.B.C. has been most valuable, but much remains to be done in the systematic recording of dialects on tape and gramophone records. There is a need, too, for the selective preservation of dialect literature and for the compilation of bibliographies. Much that has been printed is not worth reprinting, but there is room for many more county anthologies on the lines of W. J. Halliday and A. S. Umpleby, *The White Rose Garland of Yorkshire Dialect Verse and Local and Folk-lore Rhymes* (Dent, 1949) and May Yates, *A Lancashire Anthology* (Hodder and Stoughton, 1923). The bibliography included in Joseph Wright's *English Dialect Dictionary* is still useful, but it badly needs bringing up to date. Much dialect literature was issued at very low prices by publishers who were not fussy about bibliographical details such as dates of publication. There is scope for bibliographical studies of some of the more important dialect works, such as *Tim Bobbin*. Most dialect literature is out of print, but the spread of xerox reproduction offers possibilities, since many rare works are quite short and can therefore be made available to students cheaply.

The English Dialect Society, which has been defunct for more than sixty years, included among its aims the reprinting of rare dialect works, and county societies might well take over this task, as the Yorkshire Dialect Society has done.

The study of class dialects is much more difficult than the study of regional dialects. It is easier to determine a man's place of birth than his social class, and a field-worker studying class dialects is more likely than a regional dialect field-worker to be asked what the blazes it has to do with him. Techniques of investigation that have first of all been tried out in the study of fairly homogeneous rural dialects have worked well, and they can now be adapted to the study of much more complicated speech-situations. In this adaptation it will be necessary to enlist the help of both statisticians and sociologists to find out which sampling procedure is most appropriate in the choice of informants. The help of sociologists will be valuable also in the provision of objective criteria for distinguishing between one social class and another and in the introduction of the necessary rigour in methods of research. In the study of class dialects it is not enough to follow the example of the students of the older regional dialects in choosing a few good informants to represent each dialect and disregarding the rest of the population. The need for greater rigour and realism in the study of class dialects is illustrated by the discussion of the subject which became popular a few years ago, a discussion based on the assumption that there were two dialects, the U and the non-U. This is as though a student of regional dialects were to be content to classify linguistic usage as either "Yorkshire" or "non-Yorkshire." There are many varieties of upper-class English and the number of non-upper-class dialects is larger still.

There are objections to the use of terms like "upper" and "lower" at all in the study of class dialects, since they involve value judgements that interfere with complete objectivity, and the division between one class dialect and another need not necessarily be horizontal; it may be vertical. An important group of dialects which may cut across generally accepted class distinctions is the group of occupational dialects. Occupation is one of the most important strands that go to make social class, but occupation can exert its own influence on speech. One has only to think of the musical voices and clear enunciation of many Anglican clergymen, who have allowed the practice of intoning to influence their everyday speech, the clipped speech of the army officer, or the methodical but monotonous speech of the policeman accustomed to give evidence in a court of law.

There are other groups which have distinctive speech-habits: men and women and the various age-groups. So far as the quality of the voice is concerned, phoneticians may be able to analyse the qualities of a voice that enable a listener to say that the speaker is young or old or even to identify the speaker without seeing him. Differences in vocabulary or idiom present special difficulties because they are so easily borrowed, and there is room for a good deal of difference of opinion. Observation is often prompted by hostility. Women have said that men are fond of pompous phrases used with little meaning like "by and large"; men have said that women are fond of using adjectives like "extraordinary" or verbs like "cope" on trivial occasions, or of saying "honestly" in isolation rather than as part of a sentence. The best indication that a phrase is to be identified with a particular group is the sense of uneasiness that one experiences on hearing it used by a member of a different group. Questions of this kind need to be removed from the realm of subjective impression into the realm of ascertained facts.

The chief problem in the study of speech arises from the transitory nature of the utterance. In the study of colloquial English the very proper demand for documentation has sometimes distorted the evidence, in that conclusions about colloquial speech have been based on written evidence, since that was the only kind that could be quoted. Speeches in novels and plays cannot be accepted as evidence of colloquial speech as it really is any more than their plots can be regarded as unedited transcripts of life. Even the most realistic of dramatists must sometimes tighten up the dialogue; and he would be to blame if he did not. Just how much most conversation stands in need of tightening up can be appreciated if one listens to a tape-recording of one's own conversation. The tape-recording machine offers great possibilities to the student of colloquial English, especially now that it has become so well known that it no longer inhibits conversation quite so much as it did when it was first used.

The detailed examination of a large collection of recorded material is one of the chief needs for the study of spoken English. Such an examination has been undertaken as part of the Survey of English Usage which is being conducted at University College, London, under the direction of Professor Randolph Quirk, and its results are awaited with interest.[2] This Survey is concerned with "educated" English and no account is taken of dialect or sub-standard usage; but the methods used in the Survey may profitably be applied to varieties of English other than those that can be described as "educated," and an extension of the inquiry might throw light on such questions as the proportion of speakers of English who speak "educated" English and the differences between "educated" and "uneducated" English. The great advantage of the Survey is that it will examine all the grammatical data in fairly long continuous passages instead of picking out the things that seem interesting. The latter method has frequently been employed in the past, and it has the effect of concentrating attention on unusual features just because these are most likely to attract the attention of an investigator.

Those who fear that dialect studies are like mines which have yielded precious metals in the past but which are now nearly worked out may derive some reassurance by reflecting on the enormous field, hitherto almost untouched, presented by the study of idiolects. These are worthy of study both for their own sake and as a prelude to the study of dialects. Just as the study of dialects enables us to test the validity of generalizations about a language by presenting us with a smaller and more manageable body of material, so the study of idiolects enables us to achieve even greater precision. The pursuit of precision does not end when we have narrowed down the field of linguistic study from the millions who speak English to a single individual. One thing that makes the study of idiolects both interesting and important is that there are apparent inconsistencies in the speech of every individual. These may result from the speaker's life-history. If he has been used to hearing *bath* pronounced with a short vowel at home and with a long vowel at school, he may use the two pronunciations indiscriminately, but there is always the possibility that more careful observation will show that his use of the two pronunciations is less indiscriminate than it seems at first. He may use the short vowel on informal occasions or when he is at home with his family, while keeping the long vowel for use on more formal occasions. Observations of such differences leads to the study of what we are learning to call registers,[3] or varieties of language which can be associated not with a particular group of speakers but with a particular kind of occasion. Such varieties have been called situational dialects, while some writers on dialect might refuse to regard them as dialects at all; but, by whatever name they are called, such varieties have considerable linguistic and educational importance and, in studying them, philologists have done little more than scratch the surface. Their educational importance becomes clear when we recollect that a foreigner's imperfect command of English is often revealed by his achieving an unsuitable degree of informality, and English children, learning their native language, are confronted by similar problems. The best way to study a dialect is to begin by studying a large number of idiolects, and the best way of studying registers is to begin by recording the linguistic reactions of a large number of individuals to particular situations in order to find out whether any general trends can be discovered. It has been suggested that a research worker, cunningly concealed in a tobacconist's shop, might record the different ways in which customers ask for a packet of twenty cigarettes. Some sceptics might wonder whether the value of the results would be likely to justify the expenditure of time required by such methods of investigation, but there is no doubt that there is much interesting information waiting to be collected. A less expensive method of collecting information is by the once-popular practice of "mass observation," by which amateur field-workers are encouraged to report their observations on specific points. Such methods are less reliable than the employment of trained field-workers but, when the number of reports is very large, they can be used to confirm one another. Moreover, to encourage observers to become alert to linguistic variations has an educational value quite apart from the value of the material collected. A glance at the correspondence column of a newspaper when linguistic matters are under discussion provides ample evidence of the need for such education. Professor Quirk has suggested that "one should aim at seeing educated usage as far as possible against the background of educated *reaction* to usage," and he goes on to make a threefold distinction between what a man says, what he thinks that he says and what he thinks that he ought to say.[4] There would be obvious advantages if these three ways of regarding any utterance could be brought more closely together, and to encourage the habit of listening carefully to what is actually said is one way of achieving this aim.

In his article, "A New Survey of English Dialects,"[5] Eugen Dieth sought to find an explanation for what he regarded as the puzzling behaviour of Joseph Wright, who did not continue to write major works on dialect after writing *The Dialect of Windhill, The English Dialect Dictionary,* and *The English Dialect Grammar.* This is ungrateful: the remarkable thing about Wright is that one man should have achieved so much rather than that he should have turned to other philological studies after producing three pioneer works, one of them a stupendous achievement. In suggesting the lines on which English dialect studies may develop in the future, I have been careful not to suggest that all the work should necessarily be done by Professor Orton and his close associates. If I had done so, I should have invited the reply that Dr Johnson is said to have made to an admirer who suggested that, having completed his *Lives of the English Poets,* he should write *The Lives of the English Prose Writers*: "Sit down, sir!"

NOTES

[1] Harold Orton, "A New Survey of Dialect English," *Journal of the Lancashire Dialect Society,* II (1952), 6.

[2] Randolph Quirk, "Towards a Description of English Usage," *Transactions of the Philological Society* (1960), 40-61.

[3] P. Strevens, *Papers in Language and Language Teaching* (Oxford, 1965), pp. 83 ff.

[4] *Op. cit.*, 60.

[5] *Essays and Studies by Members of the English Association,* XXXII (1946), 74-104.

TWO STUDIES OF DIALECTS OF ENGLISH*

By RAVEN I. McDAVID, JR.

I

Forty years ago, no variety of the English language had been surveyed by the modern techniques of dialect investigation. Now, at least the first stage of data gathering has been completed for England and the United States, and some of the evidence has been published; a respectable beginning has been made in Scotland; in Canada there are modest first steps towards a national survey, and one has been proposed for Australia. Since there are some interesting differences in objective and method as well as fundamental similarities between the two projects furthest along, the English and the American, it is fitting to compare them in some detail, particularly in a volume dedicated to one of the directors.

Each of these surveys has been designed, essentially, by one person —by Harold Orton in England and by Hans Kurath in the United States. Each director has had experience in the field; Orton, however, did not do any of the actual interviewing for the English survey, while Kurath contributed fifteen field records to the *Linguistic Atlas of New England*. Both are thorough gentlemen—energetic, generous, and devoted to their work.

There have been several differences in administrative practices. Orton has kept control of the *Survey of English Dialects* pretty firmly in his own hands, even in retirement. At the outset of the American project, Kurath was aided by an unusually strong advisory committee of distinguished scholars; furthermore, he shared responsibilities and credit with his staff, several of whom—for example, Bernard Bloch, Lee Hultzén and Martin Joos—went on to distinguished careers in their own right. When the archives for the Atlantic Seaboard were transferred to Chicago, and editorial responsibility was assumed by Alva L. Davis and myself, he gave us free rein; although he has been readily available for consultation (and we have been happy to draw freely on his knowledge and experience), he has never sought to impose his ideas upon us. In fact, as early as 1938 he was glad to decentralize the work of the American Atlas project, since it was apparent that to organize and direct field work and editing for the entire United States and Canada was beyond the capacity of a single scholar, even if adequate funds were available—and they were not.

It thus developed that each of the regional surveys beyond the Atlantic Seaboard—the North-Central States under Albert H. Marckwardt and myself, the Upper Midwest under Harold B. Allen, Texas under Bagby Atwood and Rudy Troike, Colorado under Marjorie Kimmerle, California and Nevada under David Reed, and Nova Scotia under H. Rex Wilson—has been autonomous, though there have naturally been informal consultations among the regional directors and with Kurath. In other words, though the original plans called for a Linguistic Atlas of the United States and Canada, and though Kurath has been titular director of that project since 1930, for the past 30 years he has really been *primus inter pares,* and no one will succeed to his title. The considerable uniformity that one finds among the various regional surveys is due not to the hand of a single director, but to the fact that Kurath's principles have been pretty well accepted by the others, and that the more successful of Kurath's fieldworkers have helped to train the investigators for other regions. Thus, at various times, Kurath, Bloch and Guy S. Lowman, Jr. have helped to supervise the training of Marckwardt, Allen, Raven and Virginia McDavid, Davis, Reed and Atwood, who in turn have trained others.

The two surveys have come at different places in the careers of the directors. For Orton his *Survey* is the culmination of a distinguished record as a student of the English language, with a steady interest in dialects, particularly those of the north of England. The project encountered innumerable difficulties, especially at the beginning, because learned Britons could not see that English dialects needed to be investigated by the new techniques developed on the Continent; after all, a great deal of evidence—more than enough in the eyes of many—had been provided in the fifth volume of A. J. Ellis's *Early English Pronunciation* (1889) and in Joseph Wright's *English Dialect Dictionary* (1898-1905). In the planning days, funds were no less difficult to secure than was the support of the academic community. However, once the field work was done, editing and publishing proceeded so rapidly that all the *Basic Material*—the part most interesting, or at least most useful, to scholars—will be available not long after this Festschrift appears.

Kurath's career has been more varied; in fact, his work with the American Atlas has occupied only part of his time since the beginning of World War II. Under forty when the American Council of Learned Societies launched the project in 1929, he had begun as a Germanicist and general Indo-Europeanist, but—out of his teaching experience—

had already begun to modify older views about the dialect divisions in American English and the causes of those divisions.[1] With an uncommon genius for organizing and directing research, he developed a team of fieldworkers that in two years (1931-33) completed the interviewing for New England. Then, despite the retrenchments that all academic projects suffered under the Depression, he not only edited and published the *Linguistic Atlas of New England* (1943) but kept Lowman in the field until 1941, when he died in an automobile collision on a back road in Upstate New York; then Kurath brought me into the project to complete the field work for the Atlantic Seaboard (1945-49). Although editing came to a halt during World War II and Kurath's commitments as editor of the *Middle English Dictionary* (another project which profited from his skill at organization) took up most of his time and energy from 1946 till his retirement, he never lost sight of the aims of the Atlas project. In fact, one might say that he has had his deepest influence on dialectology during the post-war period, by helping to train a new generation of scholars and by encouraging them to develop new techniques for dealing with the linguistic phenomena of the areas of secondary and tertiary settlement.

But where Orton found his project hard to launch but relatively easy to keep going, Kurath's experience has been just the opposite. There was no difficulty at the beginning in getting approval from the scholarly community, or—by the standards of the time—rather generous financial support. But despite the expansion of American linguistics during and after World War II, there has been little money for the Atlas or for other projects in dialectology. Volatile in linguistics as in other fields, American taste has favoured the newer activities of the profession rather than the traditional ones. To promising beginners of the last two decades, new methods in second-language teaching, structuralism, generative theories and computer linguistics have all seemed more exciting than dialect investigations. Perhaps also these new developments have been less demanding (1) in terms of personal relationships with live informants in a diversity of situations and (2) in terms of the stubbornness of massive bodies of data.[2] Only with the urban crises of this decade has there come a fresh realization that divergent patterns of language behaviour must be studied against a background such as the Atlas provides; the first generous institutional support in many years has been my arrangement with the University of Chicago for released time to spend on editing.

II

As Kurath has often remarked, the presentation of facts postulates an underlying theory, though the converse is not necessarily true. In comparing the English and American surveys, one must first notice the definitions of "dialect" with which the investigators worked. Although neither project is a "pure" example of a particular point of view, there are basic differences.

No linguistic survey is designed to record the whole language of all kinds of speakers in all kinds of situations; the purpose is, rather, to provide a framework within which other studies may be more effectively designed. It is interesting to know the full range of language variety in such a rapidly growing community as Fresno, California; but to understand that complex situation—to appreciate the dynamics of variety and change—it is necessary to have a record of the usage of old-stock native Fresnonians of various age and educational and social groups, and of similar informants from surrounding communities, some of which have not changed as much as Fresno.

Consequently, a first-stage general survey of a wide area is bound to stress the older and more stable elements in the population, and the more traditional elements in the language system. To young Turks, impatient to grapple with the language problems of seething urban multitudes, such an emphasis may seem quaint or "ruralistic," but it is a necessary background for their investigations—and of course it has its uses in other kinds of linguistic work, notably in reconstructing the past stages of the language.

The English survey tacitly assumed a basic opposition between dialect and standard language, between the uncorrupted folk speech of a given locality and that entity which bears the name of Received Standard. Actually, Received Standard was more or less of a fiction, even before the rise of Harold Wilson and Twiggy and the Beatles; but it was a useful fiction, as suggesting a single ideal model of linguistic excellence, such as would befit a compact country with a single, overwhelmingly prestigious cultural focus. Since Received Standard has been well described, it made sense to confine the English investigations to what one would feel are the purest local types of speech. True, the interesting intermediate types—the everyday speech of urban centres and the smaller county towns—would be overlooked, but they could be the subject of another kind of investigation.

The North American survey started from other assumptions, arising from a different cultural situation. There is no single standard of cultivated American English; neither in Canada nor in the United States is there a community whose natural educated speech is considered worthy of emulation everywhere else. Rather, in every community of consequence (and consequence does not depend on size alone) it is assumed that educated local usage is as good as any to be found in the English-speaking world—even though in other communities it may sound a little grotesque.

For this reason, in addition to the usual folk informants—the oldest and least sophisticated local types—the American investigators have interviewed educated speakers in all parts of the United States and Canada, and an intermediate group between the two extremes, whose responses serve to indicate the direction of linguistic change. Furthermore, since "dialect" is a vague term and often misunderstood (and besides, from the earliest settlements there has been a constant process of dialect mixture in all American communities, even without taking account of the influence of foreign-language groups), informants are sought by non-linguistic criteria, such as age and education and travel.

Of course, neither Orton nor Kurath has felt that dialect investigations should cease once their surveys are completed.[3] In fact, there is a need for a new investigation every generation, to see what time and cultural change have done to local speech. Already, in New England a group of scholars from the University of Massachusetts, under the direction of Professor Audrey Duckert, have replicated the Atlas investigations of selected communities and noted the changes since 1933.[4] Furthermore, in both England and the United States there have been interesting studies of the speech of urban areas, many of them by investigators for the wider-meshed surveys, and all making use of what those surveys have revealed. As different as are the interests of William Labov from those of the Atlas, he admits that his study of New York City speech[5] would have been impossible without the records which Lowman made in 1940-41. The study of dialects, like any other study of human behaviour, is cumulative and continuing, with each investigation building on its predecessors.

III

With such different attitudes toward dialect phenomena, it is not surprising that there are differences in the research design, even though both projects have built upon the principles of field investigation as set forth by Jules Gilliéron for the *Atlas Linguistique de la France* (1902-10):

1. A network of selected communities.
2. Representative local informants in each community.
3. A questionnaire of selected items.

4. Interviewing by trained investigators.
5. Interviewing in a conversational situation.
6. Recording of responses in finely graded impressionistic phonetics.

In the application of each of these principles the two surveys differ from each other, and often both differ from Gilliéron's actual practice.

1. The English network, 311 communities, is about the same density as that of Gilliéron, whose fieldworker, Edmond Edmont, recorded the usage of some 600 French communities. The American network is much denser: over 200 communities in New England alone. However, as Kurath points out,[6] Orton was primarily interested in rural and village speech, and New England of 1930 was far less urban than England of 1950; if one applies to the two surveys the same kind of weighting of urban and rural population (the latter being proportionately more heavily represented by the criteria of both surveys), the two networks end up with about the same density.

Where the networks differ most strikingly is in the kinds of communities investigated. Despite a few urban exceptions—York, Leeds, Sheffield, Hackney (London)—most of the English communities are villages, as were all the communities in Gilliéron's survey of France. In North America, by contrast, there is every kind of settled community—from metropolitan complexes such as New York and Philadelphia to crossroads villages like Rushford, New York, and Mountville, South Carolina—to say nothing of informants living on isolated farmsteads. Cultural foci and backwaters, growing and declining towns, are all represented. In addition, since the settlement of North America is so relatively recent, there is a deliberate effort to sample what were originally compact settlements of peculiar ethnic groups: Germans in most states, Dutch in New York and Michigan, Scandinavians in Wisconsin, Finns in Minnesota; there is no parallel situation in England (at least not since the Middle Ages), and no need to worry about ethnic representation.

There are further differences in the distribution of communities. Within each American survey there has been an attempt to space the communities evenly, with some attention to population density and time of settlement. Thus in New York State only one county[7] was not investigated; in South Carolina, only 7 of 46. In the areas of secondary settlement, in the Middle West and the Rockies, there have been from 20 to 35 counties per state, depending on the density of population. In England, however, there are wide variations: 13 communities were investigated in Norfolk, 5 in Suffolk, 15 in Essex. Perhaps there is a reason for this discrepancy, but it is not apparent in Orton's *Introduction,* a volume roughly comparable to Kurath's *Handbook of the Linguistic Geography of New England.*

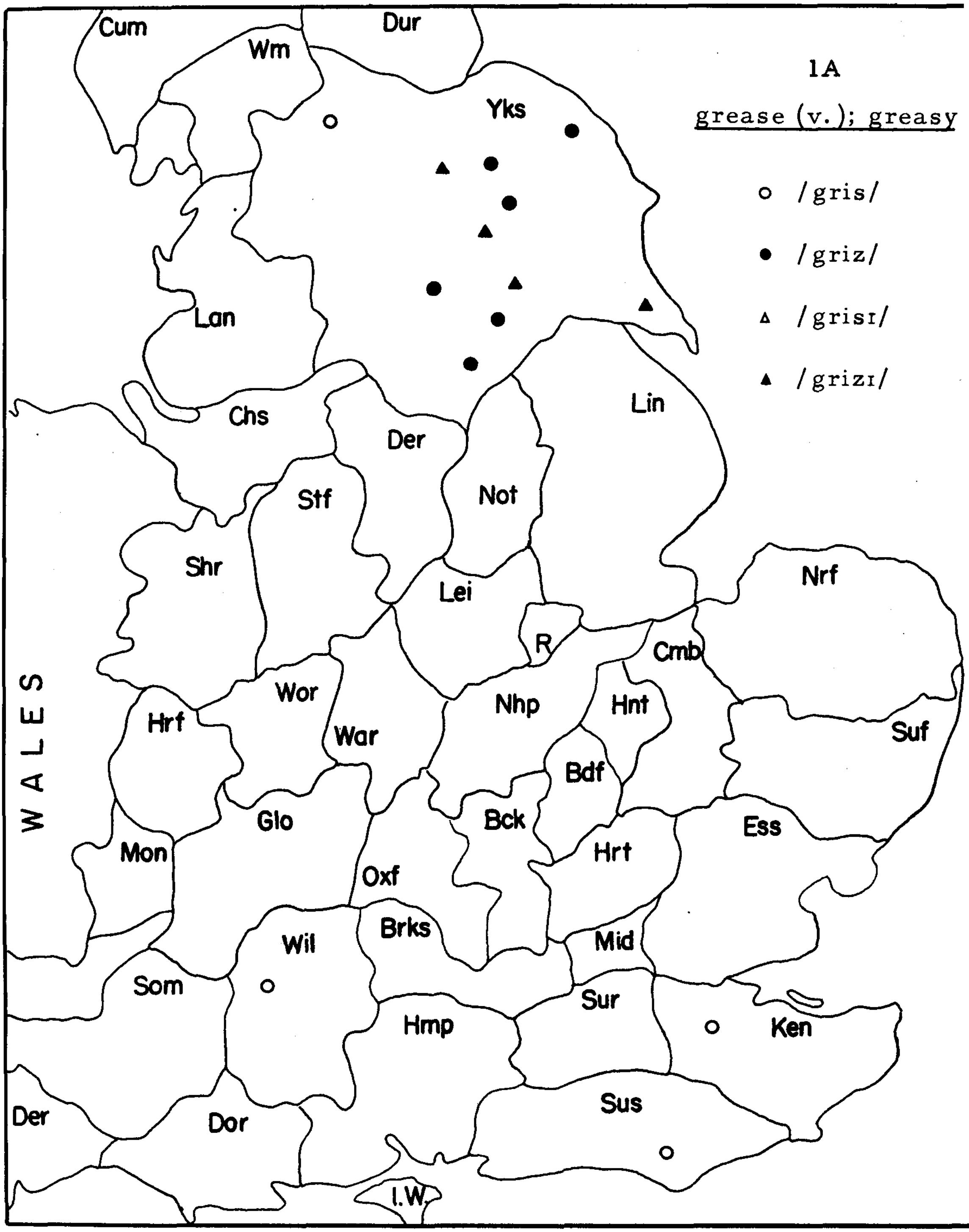
2. In Gilliéron's design, each community was represented by a single field record, from a single representative speaker of the local dialect. As we have indicated, the American fieldworkers interview informants of three basic types:

> *a.* In every community, a minimally educated representative of the oldest living native generation.
>
> *b.* In every community, a middle-aged speaker with formal education to about 16.
>
> *c.* In about a fifth of the communities, at least one cultivated speaker, highly educated[8] and representative of the best local cultural traditions.

Furthermore, in larger and more complicated communities there are even more interviews—25 in New York City, 10 in Charleston, S.C., 8 in Philadelphia. Each field record typically represents the usage of a single informant, though responses from auxiliary and supplementary informants sometimes appear.[9]

The practice of the English survey is somewhere between the French and the American. There is a single field record from each community—Great Snoring and Leeds alike—but the field record rarely represents the usage of a single informant and sometimes includes responses from as many as five. From the start it was felt necessary to share out the interviewing, both to save the fieldworkers' time and to assure expert testimony on each of the fields of the vocabulary represented in the questionnaire. All of these informants, of course, were supposed to be of the same cultural level and to represent the local traditions of folk speech; even so, dividing up the questionnaire in this fashion poses many problems in ascertaining the structure of the local dialect.[10]

3. The questionnaires of both projects are designed to sample pronunciation, grammar and vocabulary. The American questionnaire is concerned with both relics and innovations, including the pronunciations of *library, postoffice, hotel, theater, hospital,* and the various names for the baby carriage ("perambulator") and kerosene ("paraffin"); whether these terms are "dialectal" or not is a matter of one's personal definition, though they show clear regional and social variations in North America. But even in the domain of unquestioned folk speech there are omissions in the English questionnaire that keep students from making as effective comparisons as they might between English and American usage. Among the items not recorded in England are the



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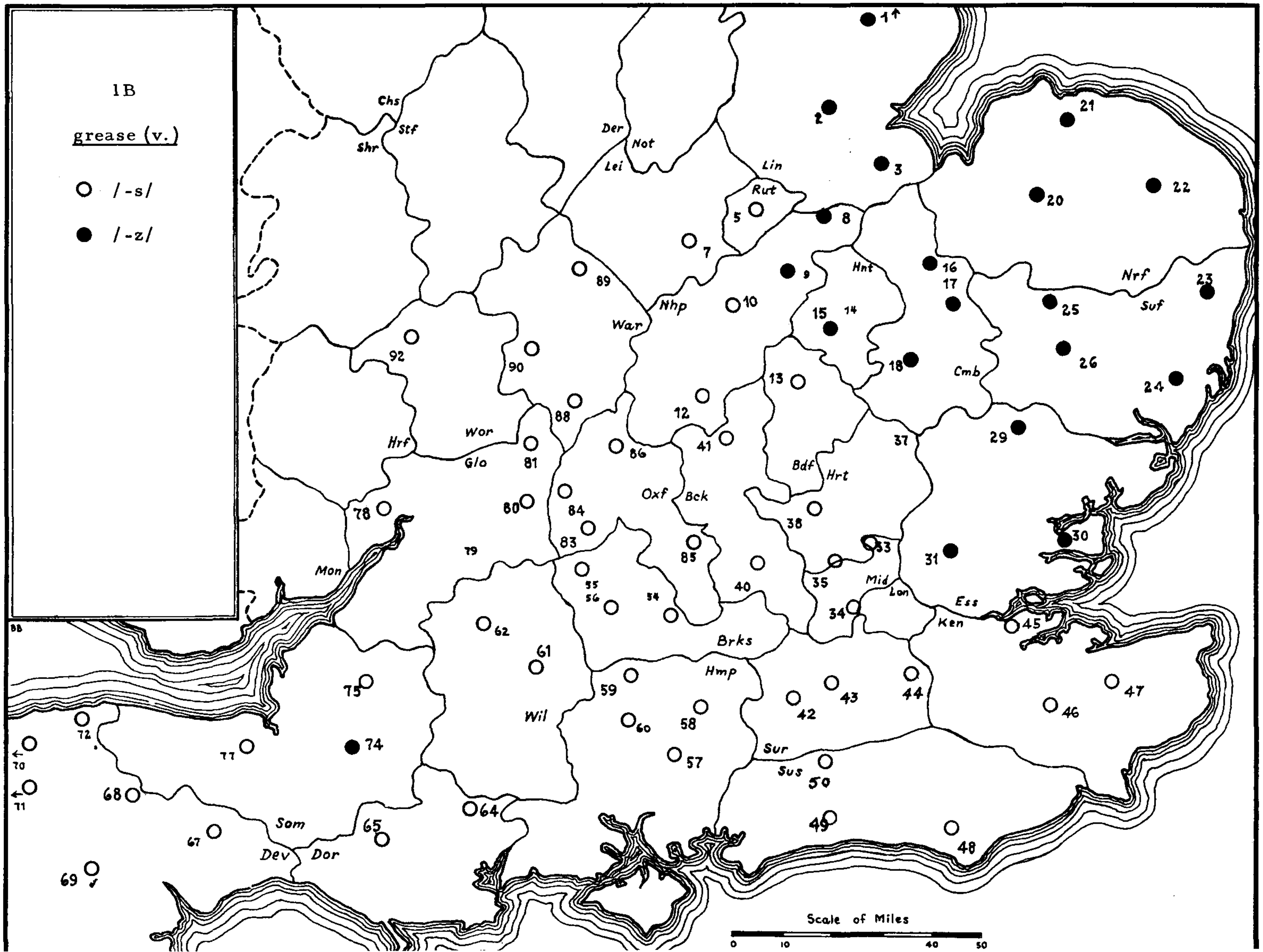
grease (v.); greasy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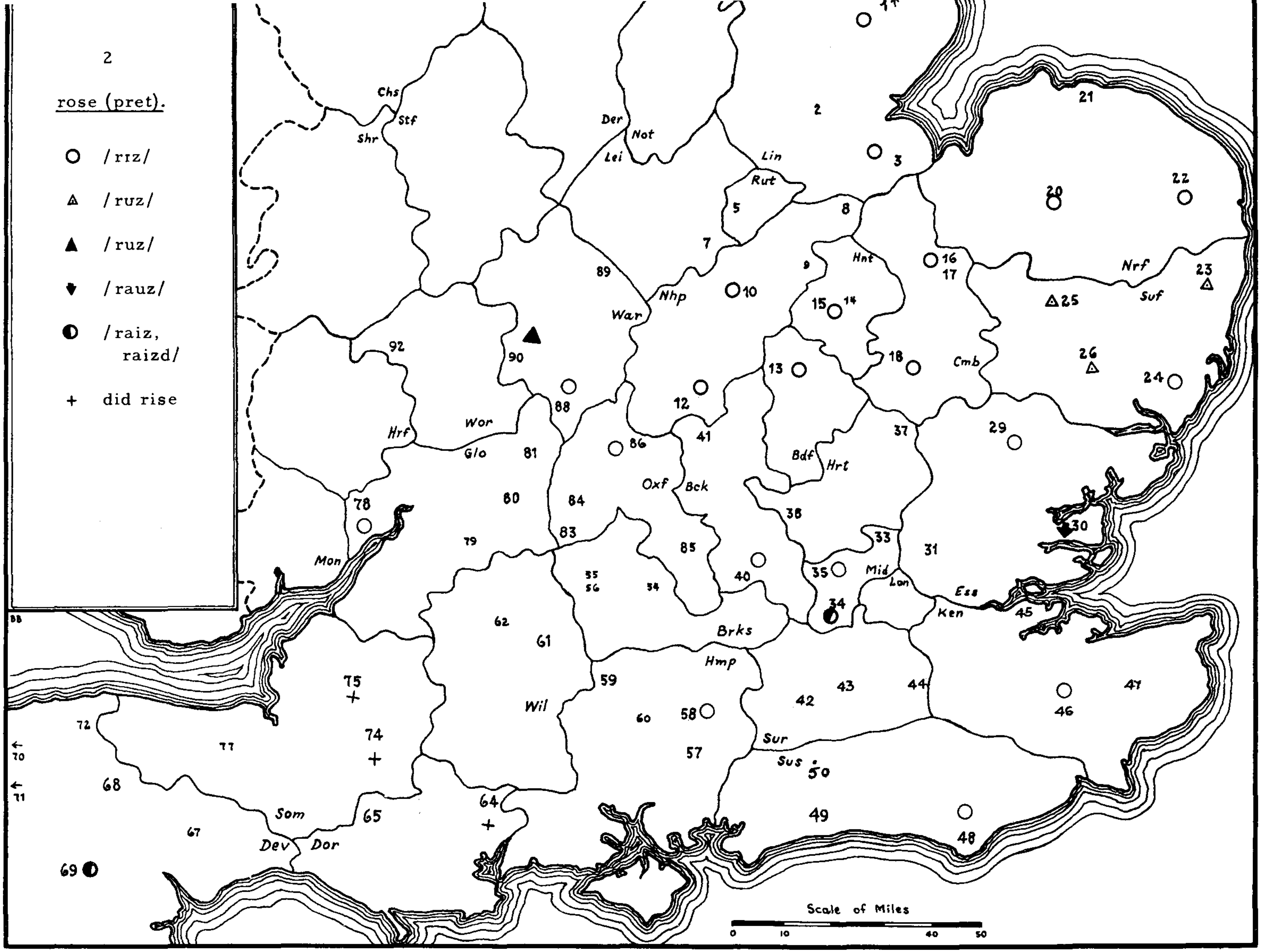2
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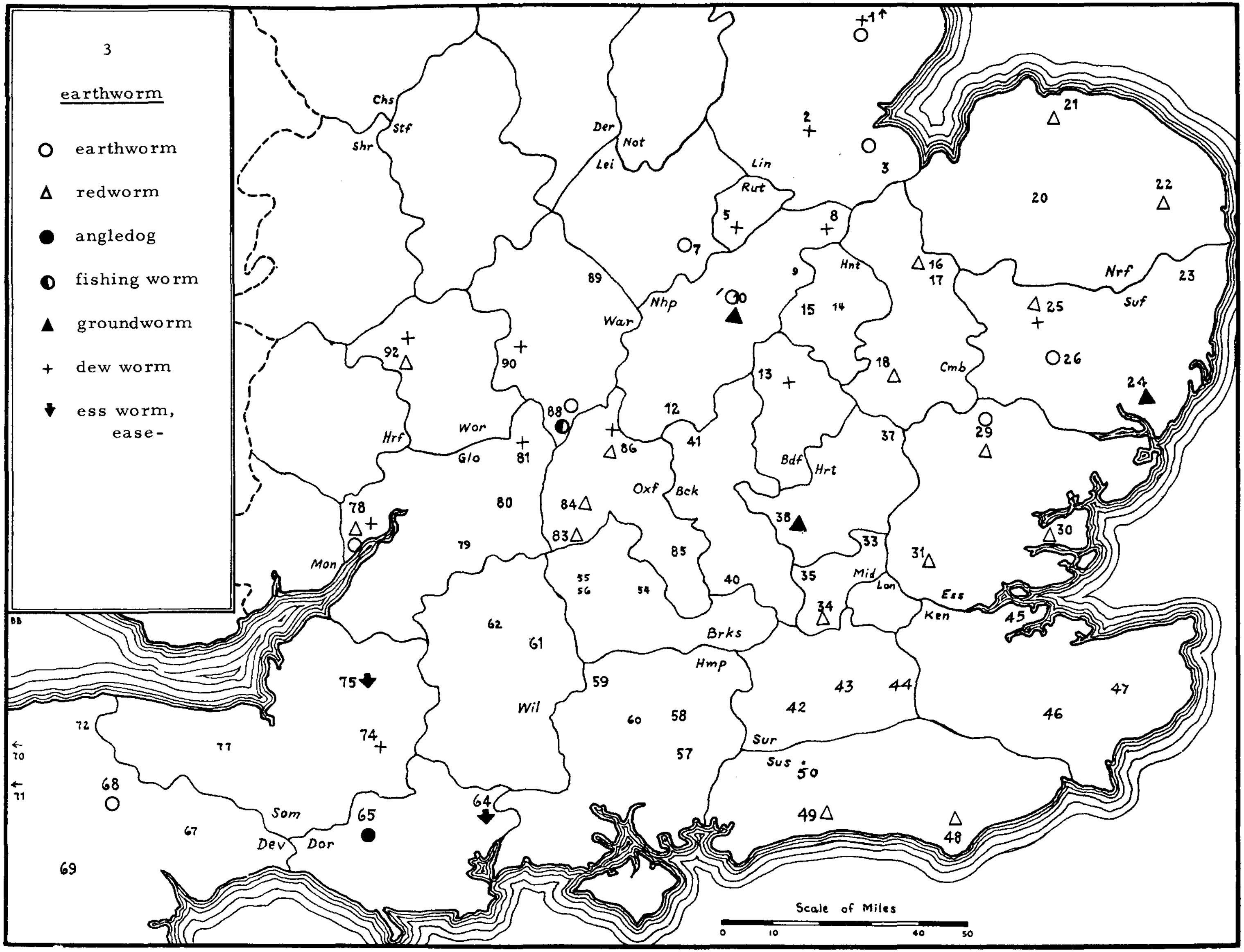

3

earthworm

○ earthworm
△ redworm
● angledog
◐ fishing worm
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+ dew worm
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names for the *earthworm* and the *dragon fly*, the past tenses of *climb* and *dive* and *rise*, the pronunciations of *January* and *February*, of the verb *to grease* and the adjective *greasy*. That such items have significant variants in English folk speech is shown not only by their distribution in the primary areas of American settlement but also by the English field records made by Lowman in 1937-38, to say nothing of occasional responses recorded by the English investigators. Undoubtedly there were sound reasons behind Orton's decisions; but the English data would have been far more useful, both synchronically and diachronically, had the American questionnaires—accessible since the 1930s—been replicated in more detail on items of common experience (see Maps 1-3).

The English questionnaire follows Gilliéron's ideal of uniformity throughout the area under investigation—though, since interesting new items keep turning up, Gilliéron himself observed that the perfect questionnaire cannot be devised until after all the field work has been completed. In the United States, on the other hand, despite a substantial common core, the questionnaires vary from one region to another, in response to differences in topography, ecology, culture and ethnic composition.[11]

In length, the English questionnaire is considerably greater—nearly 1,100 items to about 750 for the longer form of the American one (Kurath's shorter version, the basis of most of the regional questionnaires used away from the Atlantic Seaboard, has about 520). Orton estimates a minimum of 18 hours for a complete interview, which seems a little long by American experience; here, a practised fieldworker could comfortably complete the long questionnaire in 8 hours, the short one in 6.[12] The difference is perhaps accounted for by the more rigid structure of the English questionnaire, in which each response was sought by a specific question, with deviations in procedure being discouraged. The American investigators, in contrast—though they shared their most successful frames for eliciting responses—were encouraged to use their ingenuity as the situation suggested; some of them were able to get up to half of the responses from the informant's unguarded free conversation. Whether uniformity in procedure is as important as naturalness in usage is a problem for each student to appraise.[13]

4. As an interesting coincidence, the field work for the English *Survey* and that for the *Linguistic Atlas of New England* were each shared by 9 investigators.[14] In each, one investigator—Stanley Ellis for Orton, Lowman for Kurath—did nearly 40% of the interviews, 118 and 158 respectively. Scholars are naturally interested in how the

various investigators for a given survey measure up against each other, since everyone has his strengths and weaknesses in an interviewing situation. For the English survey there is no explicit comparison of the fieldworkers;[15] on the other hand, the New England *Handbook* (52-53) rates Kurath's investigators on 9 scales. Although Kurath, Lowman and Bloch showed general superiority, on some scales they were not as high as some of their colleagues.[16] Probably, with the more rigid form of eliciting questions in the English survey, these detailed ratings, though informative for the reader, would be less important than in the American situation where the investigators were more on their own.[17] In any event, the person examining either set of data is better off than in consulting the French *Atlas*, where a single fieldworker was used, whose strengths and weaknesses are not only unknown but impossible to reconstruct.

5. Since every interview is an independent exercise in interpersonal relationships, some interview situations will inevitably be more relaxed than others. We can probably assume for both surveys that some interviewers were more successful than others in adapting to various kinds of personality, and that those who continued to do field work over a period of years were among the most successful.

6. The transcriptions for the English survey are in the unmodified International Phonetic Alphabet; those for the American atlases are in a modified form developed by Kurath—including differentiation of low-central and low-back unrounded vowels. With the IPA as a given referent, Orton offers no discussion of variations in practice among the fieldworkers; Kurath provides a full chapter in the New England *Handbook* in explanation of the phonetic alphabet and other symbols, and of variations among the fieldworkers, particularly in handling the low-central and low-back range.[18]

Both projects have supplemented the field records with electronic recordings. At the end of the New England field work, several dozen aluminium disc records of the natural speech of informants were made by the associate director, Miles L. Hanley. These have not yet been made available to the public, nor was anything like Hanley's project attempted for the Middle and South Atlantic States. With the advent of lightweight tape recorders, several of the regional directors began to supplement field interviews with tapes; in fact, some fieldworkers have taped their entire interviews.[19] None of these American regional surveys, however, has provided an archive of recordings.[20] The English fieldworkers, in contrast, not only have made supplementary recordings of many of their informants but plan to issue phonograph records as part of their publication programme.

IV

Gilliéron's *Atlas Linguistique de la France* and the subsequent *Sprach- und Sachatlas Italiens und der Südschweiz* (1928-40) presented their basic information in cartographic form, with the responses of each informant for a given item overprinted in full phonetic detail on a base map, by lithoprinting from hand lettering. The *Linguistic Atlas of New England* was published in an analogous format, and preliminary drafting was done for some of the materials from the South Atlantic States. However, even before he gave up active editing, Kurath decided to publish the evidence from the Middle and South Atlantic States in tables, probably printed by photo-offset from typed copy.[21] Conceding that the cartographic presentation of the data is more impressive, he found three compelling arguments against it:

> *a*. The giant folio volumes required for cartographic presentation are not only unhandy to shelve but cumbersome to use.
>
> *b*. With the rise in draughtsmen's wages, the cost of preparing the overprints would far exceed that of field work and editing.
>
> *c*. In preparing interpretative charts, it is easier to work from tables than from maps. This is especially true when, as in the American atlases, a community is normally represented by at least two informants, and may be represented by a dozen or more.

For the Middle and South Atlantic States the presentation will be essentially that of the New England *Atlas*, with each item preceded by a brief commentary; but the data will appear in tables instead of maps. A similar format is tentatively proposed for the North-Central States. For the Upper Midwest, where evidence gathered in the field has been supplemented by correspondence checklists,[22] Allen has proposed a format somewhere between simple presentation of data and interpretative studies. In other regions editorial plans are still pending.

Orton's *Basic Material*—four regional volumes, each in three parts—is comparable to the *Linguistic Atlas of New England* and the forthcoming *Linguistic Atlas of the Middle and South Atlantic States*. The phonetic data for each item are presented in tabular form, paragraphed by English counties. The only obvious objections are trivial: one might have preferred larger pages, so that the *Survey* could have been shelved with analogous works; perhaps, also, the number of special explanatory symbols could have been reduced, or a key—something like the pronunciation line in a dictionary—could have been printed at the foot of alternate pages.[23] But the severest critics concede that the *Basic Material* volumes are very easy to use.

From Gilliéron on it has been customary to provide a guide to a linguistic atlas, so that it can be consulted effectively. This purpose is served by Kurath's *Handbook of the Linguistic Geography of New England* and by Orton's *Introduction.*[24] A comparison of these guides reveals some striking differences, which may reflect the temperaments of the two directors or the financial resources available to them.

With larger pages and more than twice as many of them, the *Handbook* offers at least four times as much information as the *Introduction.* When it is further noted that nearly two-thirds of the latter is taken up with Orton's questionnaire, while the New England worksheets (including a more detailed explanation of sources, rationale and use than Orton provides) account for only 5% of the *Handbook,* the difference is even more striking. In addition to the ranking of the fieldworkers and the greater detail on communities and informants,[25] the *Handbook* provides the following kinds of information that are lacking in the *Introduction* or elsewhere in the *Survey:*

a. A summary of dialect areas and a discussion of their origins.
b. A bibliography of linguistic geography.
c. A summary of settlement history and population movements, with attention to geological features of importance.
d. A bibliography of regional history (in addition to the bibliographical information on particular communities).

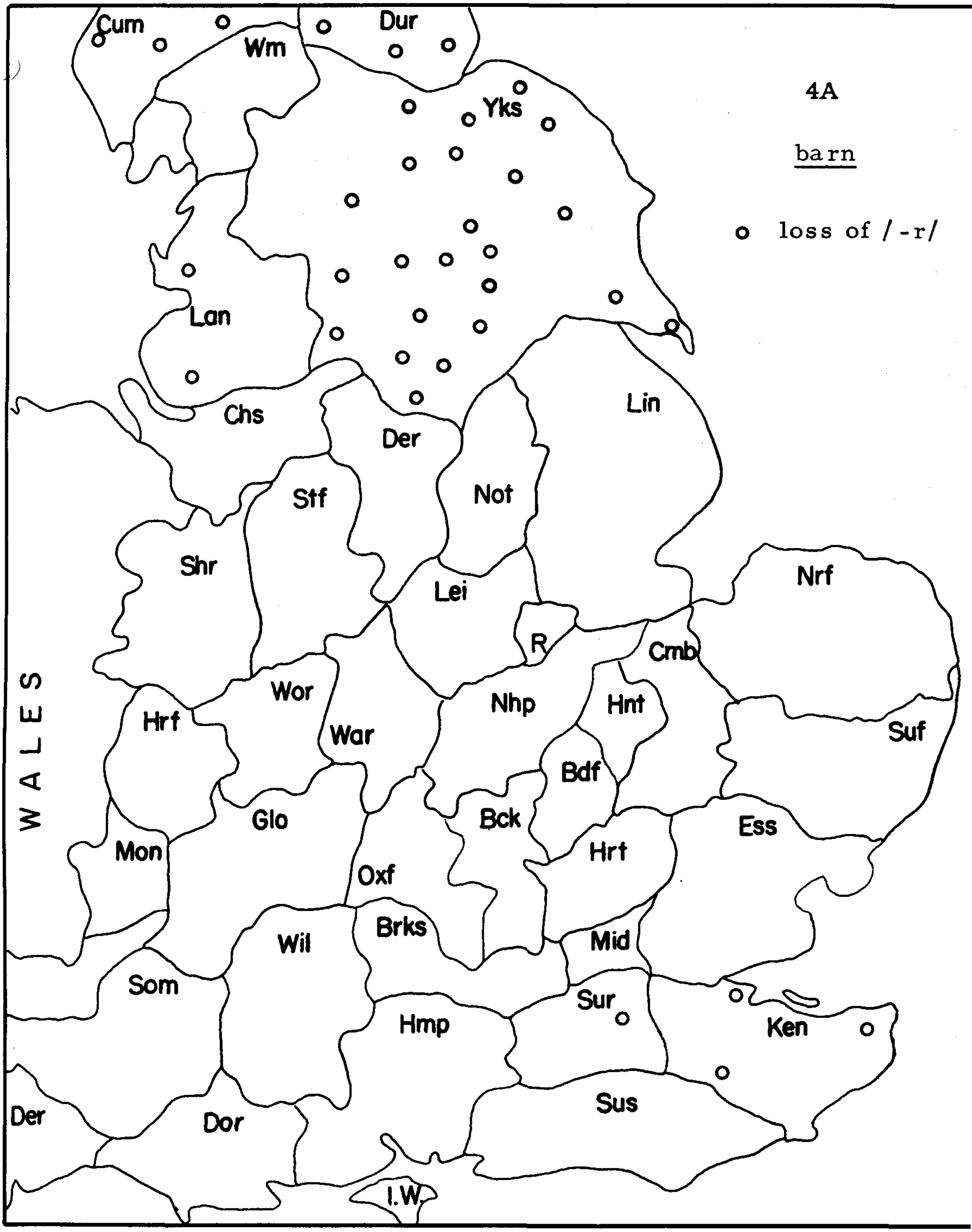
In short, there is much more material in the *Handbook* to help the scholar interpret the recorded linguistic data. It is possible that the education of the average British linguist (or other potential user of the *Survey*) would include so deep an immersion in topography, communications, demography and local history that he could do without this help; but his American counterpart could not, even in dealing with the dialects of his own region. And without some such leads he would not even know where to begin. Still, since Orton's financial support has always been limited, it is understandable that the *Introduction* might not have such copious information as one would like. One would hope that, once the *Basic Material* is published, the additional information will be provided, either in a separate publication or in one of the interpretative studies.

All linguistic atlases have allowed for such interpretative studies, for generalizations from the field data. One might say, in fact, that Wrede's *Deutscher Sprachatlas* (1926-) is really an interpretative work, since it involves generalizing from the data contained in 44,251 responses to Georg Wenker's original questionnaire. Of the American surveys, only one so far has presented its findings solely in an interpretative study—Atwood's *The Regional Vocabulary of Texas* (1962).[26] For the Atlantic Seaboard there are three summaries for parts of the data:

> Kurath, *A Word Geography of the Eastern United States* (1949).[27]
> Atwood, *A Survey of Verb Forms in the Eastern United States* (1953).[28]
> Kurath and McDavid, *The Pronunciation of English in the Atlantic States* (1961).

These volumes are not intended as substitutes for the regional atlases, nor are they part of the official publication programme. Rather, they were designed both to summarize some of the evidence and to interpret it, in terms of geographical, demographic and social forces, for the benefit of the reader who is not a professional dialectologist. *The Pronunciation,* for instance, is concerned not only with the various phonic qualities of the phonemes in particular environments but with phonemic incidence and with differences in the phonemic system.

For the English *Survey* it is proposed to have a *Linguistic Atlas of England* in addition to the *Basic Material.* As yet there is no published statement about its plan and content. If, however, one may draw inferences from the *Phonological Atlas of the Northern Region* (1966) by Eduard Kolb, one of Orton's associates, one could still be looking for the broad-gauge interpretation the more general reader desires and needs. Essentially, the *Phonological Atlas* merely reproduces in elaborate and expensive cartographic form the phonic evidence already available in the *Basic Material.* Its emphasis is phonic, not phonemic; it is arranged by Middle English ancestral sounds rather than by present-day significant sound-types; and on the differences between the phonemic systems of the various dialects it is silent. For instance, the *Basic Material* indicates that in several communities the contrast between /o/ and /ɔ/ has been lost before postvocalic /-r/ and its counterparts, as in *horse* and *hoarse.* This neutralization is also found in British Received Pronunciation and in many varieties of North American English.[29] But though *hoarse* is an item in Orton's questionnaire, Kolb has not included it in his study, much less the comparison with *horse*; nor does he touch the similar neutralization of the vowels of *four* and *forty.* One would like to suggest that Orton's proposed *Linguistic Atlas of England* be modelled more closely on Kurath's *Word Geography,* that if anything Orton should provide fuller detail about topography, communications and population history. If he must choose between this background information and elaborate cartography, he could well


4A

barn

○ loss of /-r/
Cum
Wm
Dur
Yks
Lan
Chs
Der
Lin
Not
Stf
Shr
Lei
Nrf
R
Cmb
Wor
Nhp
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Hrf
War
Suf
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WALES
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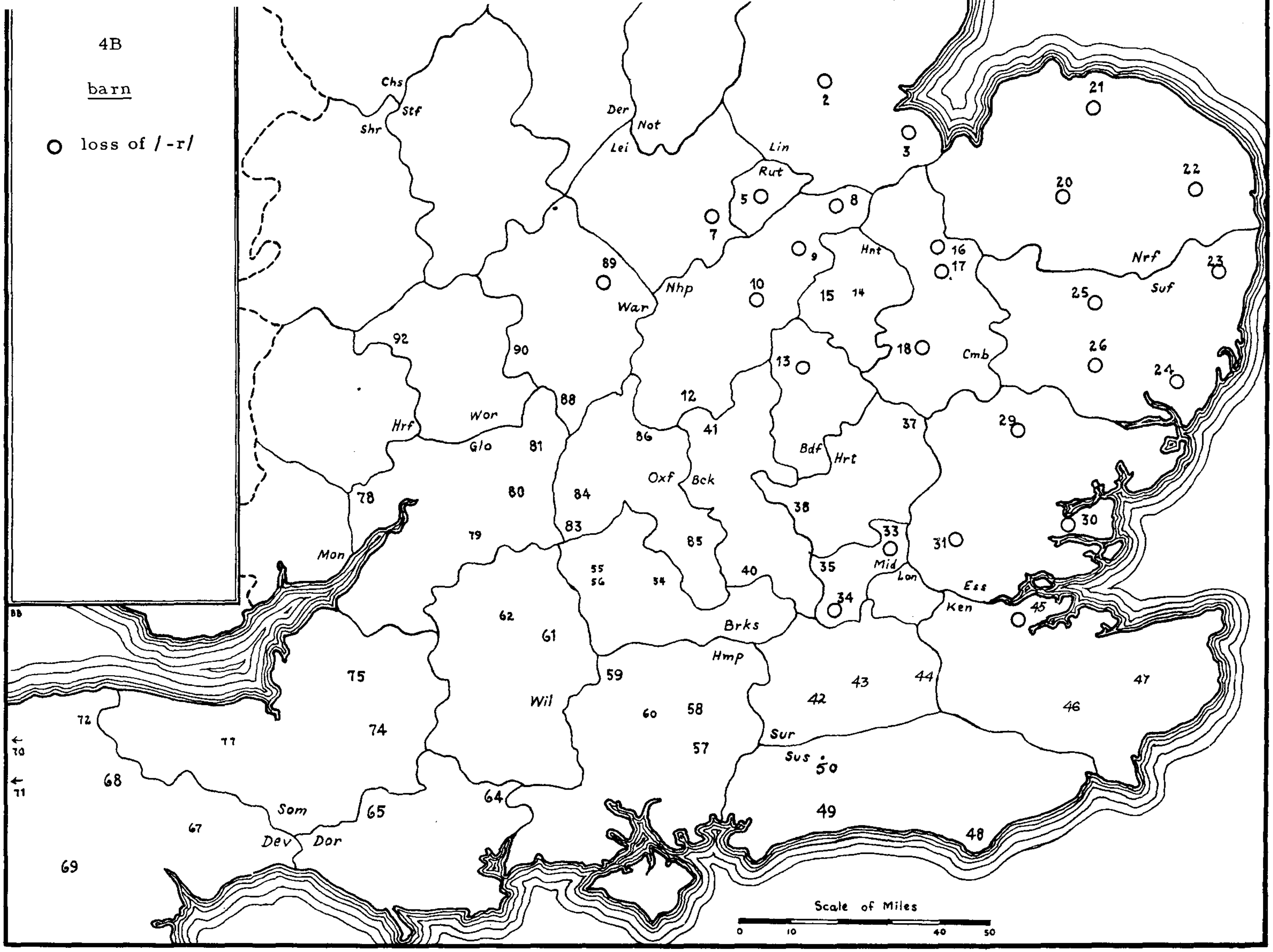
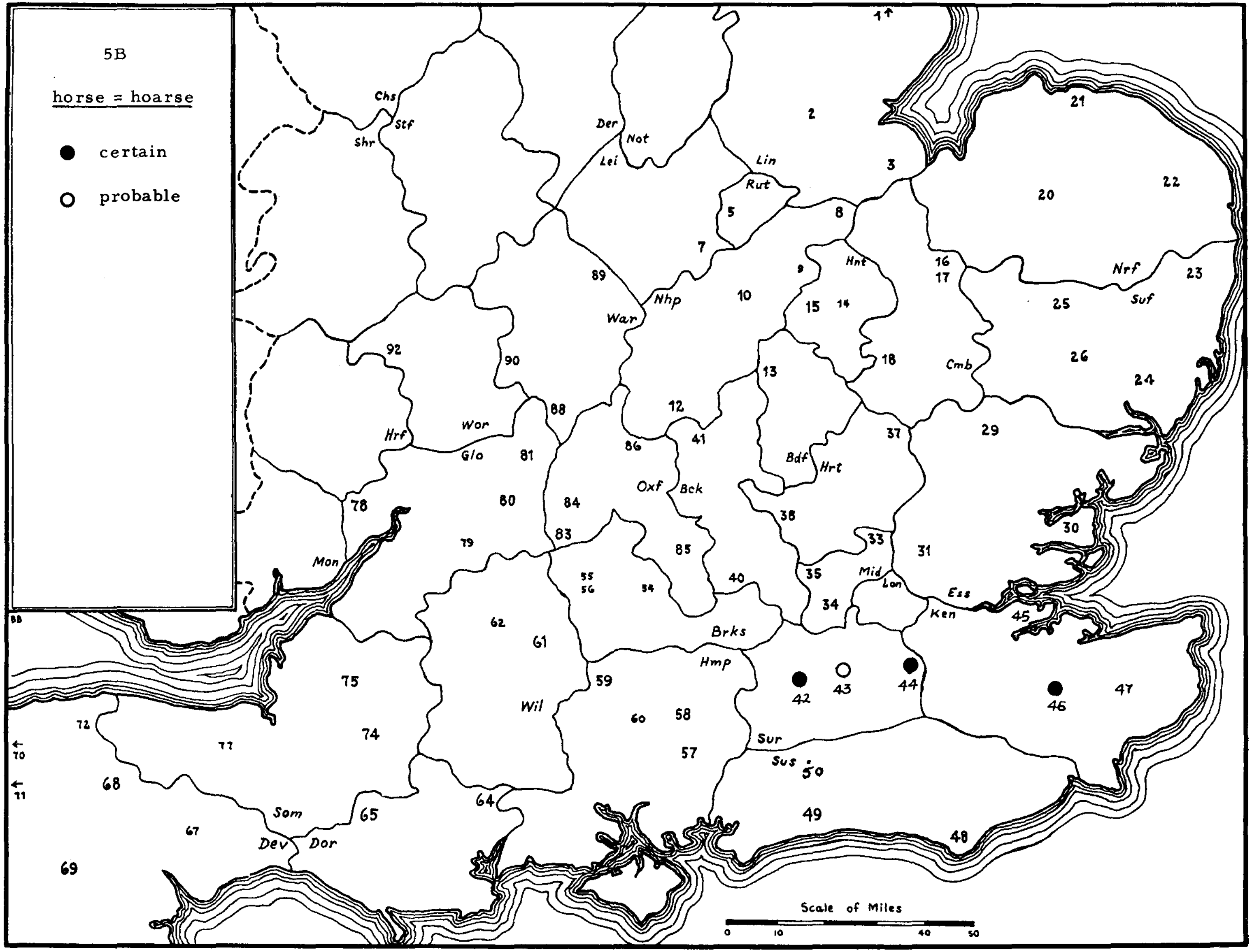
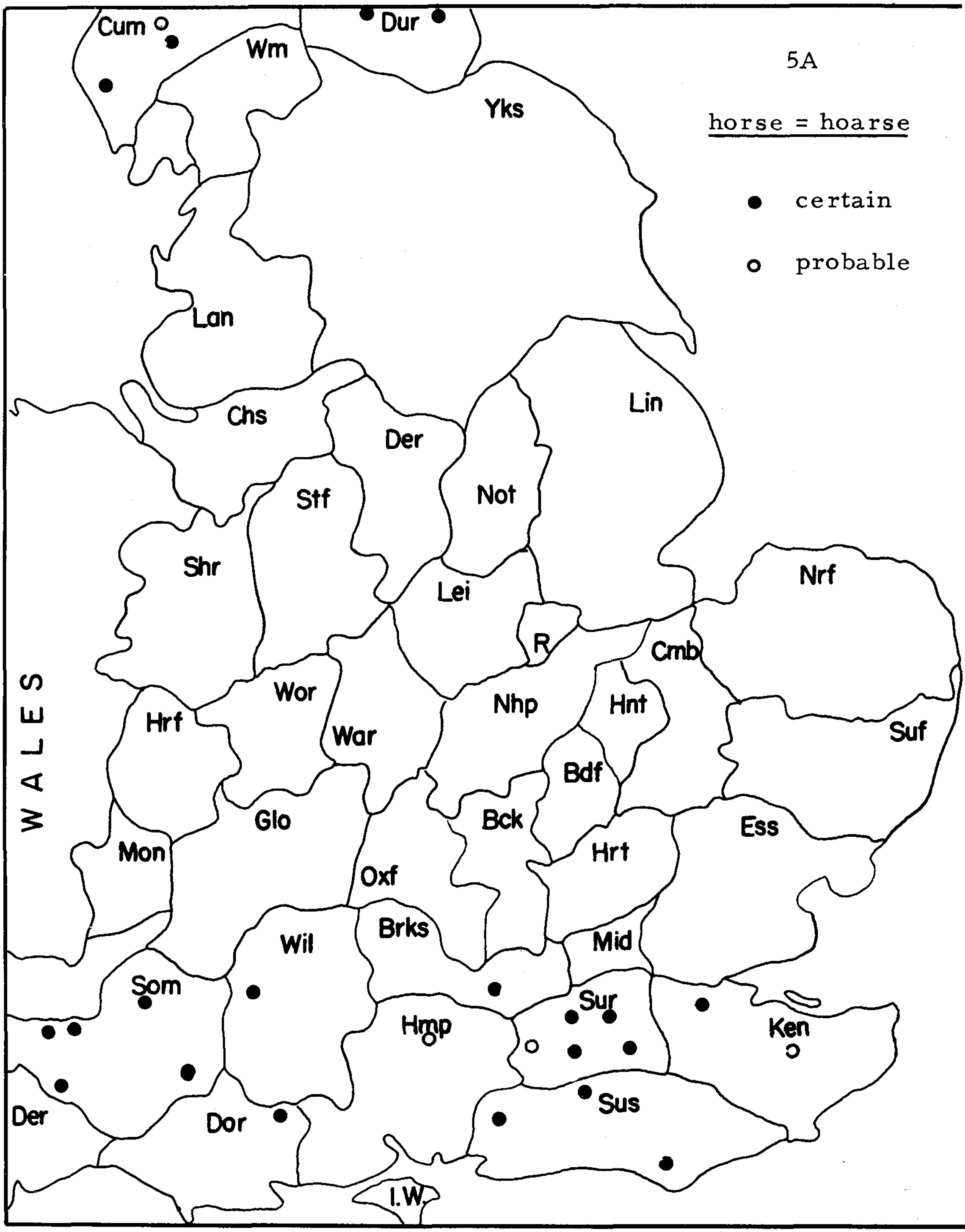

4B

barn

○ loss of /-r/


5B

horse = hoarse


5A
horse = hoarse
● certain
○ probable
Cum
Wm
Dur
Yks
Lan
Lin
Chs
Der
Not
Stf
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Lei
Nrf
R
Cmb
Wor
Nhp
Hnt
Hrf
War
Suf
Bdf
WALES
Glo
Bck
Ess
Mon
Hrt
Oxf
Brks
Mid
Wil
Som
Sur
Hmp
Ken
Sus
Der
Dor
I.W.

dispense with the latter. For the purpose of interpretative volumes is to lead the readers to investigate intelligently on their own the greater riches of the *Basic Material.*

V

Although this comparison has so far been concerned with evaluating Orton's *Survey* as objectively as possible against analogous studies, it would be unfortunate to leave the impression that it is not a significant work. It is, indeed, a monumental contribution to knowledge.

First of all, it is the first investigation of English dialects to be built upon field investigations on the spot by trained investigators using a uniform questionnaire. However we may argue about their procedures and what they found, there are indubitable recordings of identifiable informants in specific localities, and they will be indispensable for generations of students of the English language.

Second, where the data can be checked against other field investigations, similar patterns are found (Maps 4-5). This is especially true for the loss of postvocalic /-r/ in *barn,* in Southern England. For the lack of contrast between *horse* and *hoarse* the greater number of informants in the *Survey* and perhaps the increasing influence of Received Pronunciation may explain the higher frequency of this neutralization.

Finally, neither study pretends to have said the last word; each provides a framework within which other scholars may conduct more intensive investigations. It is interesting that the new attention to urban problems has provoked similar responses from dialectologists on both sides of the Atlantic. If the responses in the United States have come earlier and on a larger scale, it is not merely that the problems are more acute, but that more evidence has been available for a longer time. What has been undertaken in the United States so far by Frank, Hubbell, DeCamp, Sawyer, Howren, Pederson, Labov, Shuy and Udell[30] is now being essayed in Britain by Stanley Ellis and his colleagues. These new studies—which could never have been undertaken without the framework provided by the American regional atlases and Orton's *Survey*—not only should provide us with the means for more sensitive and effective teaching of English in the schools, but should lead us to a deeper understanding of human behaviour, through a greater appreciation of man's most characteristic activity, the use of language.

NOTES

* For statements about the American atlases I am naturally indebted to long association with Kurath, Marckwardt, Allen and others, as well as to the American Council of Learned Societies, which sponsored the project and has contributed generously to its support. Maps 1A, 4A, 5A are based on what has been published of Orton's *Basic Material.* Maps 1B, 2, 3, 4B, 5B are based on the unpublished field records from southern England, made by Lowman in 1937-38. A monograph summarizing the lexical and grammatical evidence in these records is being prepared by Dr. Wolfgang Viereck of the University of Hamburg.

[1] "The Origin of Dialectal Differences in American English," *Modern Philology,* XXV (1927-28), 385-95; "American Pronunciation," *SPE Tract* XXX (1928), 279-97.

[2] The possible applications of linguistics to the needs of Cold War diplomacy and defence technology have resulted in generous government support for several kinds of research in some of the newer aspects of linguistics; for example, much of the work of Noam Chomsky and his transformational disciples has been subsidized by the military establishment.

[3] It is hard to convince both the learned and the laity that the study of speech is a continuing business. As we mentioned above, the mere existence of the work of Ellis and Wright—however outdated their methods—for a long time stood in the way of Orton's project. And every field investigator encounters the notion that amateur studies or regional novels have said everything. I recall the incredulity of a county official in Milledgeville, Georgia: "Isn't all that in *Gone with the Wind?*"

[4] For example, Mrs Ruth Schell Porter, "A Dialect Study in Dartmouth, Massachusetts," *Pub. Am. Dial. Soc.,* XLIII (1965), 1-43. Professor Duckert herself has revisited Plymouth, Mass., and by good fortune has been able to interview one of the original informants for the New England *Atlas.* A report of her investigation was presented to the Linguistic Society of America, Dec. 29, 1968.

[5] *The Social Stratification of English in New York City,* Washington, D.C., Center for Applied Linguistics, 1966. The field records for the *Linguistic Atlas of the North-Central States* were also utilized by Roger W. Shuy and his associates in their study of social dialects in Detroit, Michigan, 1966-67.

[6] Review of the *Survey of English Dialects: Introduction* and *The Basic Material,* Vol. 1, in *American Speech,* XXXVIII (1963), 124-29.

[7] Rockland, the southernmost county on the west bank of the Hudson. For Atlas purposes, the county is the basic community for all regions except New England, where the smaller township is the more effective unit of local government.

[8] A cultivated informant is usually a graduate of one of the more prestigious colleges, but there are exceptions—members of old families who were educated by private tutors. One of these was a Pulitzer Prize journalist, another an internationally known water colourist.

[9] An "auxiliary informant" is a husband, wife, other kinsman or long-time friend who is present during parts of the interview and offers his responses (sometimes when the principal informant is unable to answer, sometimes when he disagrees with a response the principal informant has made). A "supplementary informant" is someone with a background similar to that of the principal informant, who completes the interview when the principal informant cannot.

[10] The New England *Handbook* provides much more information than Orton offers about the communities and informants. Typically, Kurath's historiographer, the late Marcus L. Hansen, provides a brief history of the community with population changes, the names of local histories if any, a biographical sketch of each informant, and notes on his speech characteristics, whether apparently idiosyncratic or typical of a wider area. The character sketches are often quite vivid.

[11] A compilation of atlas questionnaires for field work (or "work sheets," as Kurath prefers to call them), edited by Virginia and Raven McDavid, was published in 1951. A second edition of this compilation, with Davis as a third editor, will be published by the University of Chicago Press in 1969.

Some 1500 interviews had been completed for the various American surveys before Orton began his investigations.

[12] I have actually completed a long interview in about four hours, a short one in two. But this demanded extraordinary rapport with the informant.

[13] In the American cultural situation, conversational responses are especially valuable for grammatical evidence. Even illiterates have confused notions about "correctness" when they are confronted with a choice of grammatical forms—though their notions are probably no more inaccurate than those of the educated, if we examine the hostile reactions to *Webster's Third New International Dictionary* (1961). Under direct questioning an informant is not only likely to give the "standard" form (or what he thinks is "standard") but to deny using non-standard forms that the fieldworker has noted as common in his unguarded speech. As James H. Sledd put it, "Any red-blooded American would prefer incest to *ain't,*" *Language,* XL (1964), 473.

[14] Lowman and I did most of the field work for the Middle and South Atlantic States. In the North-Central States I did over half the interviewing, though fourteen others participated; in the Upper Midwest Allen did the greater part, with six others helping.

[15] One may of course draw certain conclusions, as from the apparent ability of fieldworkers to elicit non-standard grammatical forms.

[16] For other regions, there have been informal comparisons. A field record which Bloch made of my speech in 1937 is useful in appraising his transcriptions, since I have subsequently made a tape of the responses he recorded. What is particularly interesting is the consistency of the transcriptions made by fieldworkers with comparable training. There are only minute differences between my records and those of my wife and Davis; all of us were trained by Bloch.

[17] Unfortunately, in some American surveys there are striking differences where the fieldworkers have not been given a period of common training or the opportunity to do practice interviews under the supervision of experienced investigators. This is regrettably true of most of the field records from Indiana.

[18] This area of the vowel quadrangle is very important in North America, since a number of American dialects (including most of Canada) lack a contrast between /a/ and /ɔ/, as between *cot* and *caught*. For certain other dialects, as those of east Texas, this contrast is lacking before /-r/ or its counterparts, as in *card* and *cord*.

[19] In fact, some fieldworkers have conducted interviews without transcribing on the spot and have later transcribed (or had others transcribe) from the tapes. For a discussion of this procedure see my "Tape Recording in Dialect Geography: a Cautionary Note," *Journal of the Canadian Linguistic Association,* III (1957-58), 3-8.

[20] However, a parallel project, Recordings of Standard English, directed by Davis, will provide a wide sampling of cultivated American speech.

[21] The development of interchangeable shuttles for electric typewriters has made available an almost unlimited variety of phonetic characters. Several reference works with difficult typography, notably the *Middle English Dictionary,* have been published in this fashion.

[22] The *Deutscher Sprachatlas* of Wenker and Wrede was prepared from data collected by correspondence; the atlases of Norway and the Netherlands have also relied on correspondence. After Gilliéron—and Romance dialectologists in general—pointed out that the German method was notoriously ineffective in achieving its primary aim, the collection of phonological data, the correspondence method fell into disrepute. However, in his dissertion, *A Word Atlas of the Great Lakes Region* (Michigan, microfilm, 1949), Davis showed that a carefully prepared multiple-choice questionnaire could yield a great deal of reliable vocabulary evidence. Since then, collection of vocabulary evidence by correspondence questionnaires (or "checklists," as distinguished from the "work sheets" used for field interviewing) has been a part of the programme of the regional surveys in the Upper Midwest, the Rocky Mountains, and the Pacific States. For the Gulf States it has provided the only systematic evidence available. This method has also been used by Angus McIntosh in his Linguistic Survey of Scotland.

[23] Since there are only 311 interviews, one might also prefer to have all the evidence for a given item in one place, rather than divided among four volumes. Orton, however, justifiably felt that publication of the northern materials would bring both critical approval and financial support that would make possible the early publication of his other material.

[24] A *Handbook* for the Upper Midwest is now being edited; one is also planned for the Middle and South Atlantic States.

[25] A minor irritation: the two maps in the *Introduction*—the national network and the localities recorded by each fieldworker—are so small that the symbols are hard to distinguish, and the symbols for the various fieldworkers are not distinctive enough.

[26] Atwood's data, vocabulary plus a number of verb forms, were gathered by graduate students as class assignments over a period of years.

[27] The *Word Geography* went to press before the completion of field work in South Carolina, eastern Georgia, and upstate New York. For these regions it is partially supplemented by two articles of mine: "The Folk Vocabulary of New York State," *NYFQ,* VII (1951), 173-92, and "The Position of the Charleston Dialect," *Pub. Am. Dial. Soc.,* XXIII (1955), 35-53.

[28] Further data are provided in Virginia McDavid, *Verb Forms in the North-Central States and Upper Midwest,* diss. (microfilm), 1956.

[29] Along the Atlantic Seaboard this contrast is lacking in all classes of speakers in Metropolitan New York, the Hudson Valley, and most of Pennsylvania. Homonymy is spreading in the area of New England settlement and is prevalent in most of the United States west of the Appalachians, as well as in most of Canada.

[30] In addition to works already mentioned, there are Yakira H. Frank, *The Speech of New York City,* diss., University of Michigan, 1948; Allan F. Hubbell, *The Pronunciation of English in New York City: Consonants and Vowels,* New York, 1950; David De Camp, "The Pronunciation of English in San Francisco," *Orbis,* VII (1958), 372-91, VIII (1959), 54-77; Janet B. Sawyer, *A Dialect Study of San Antonia, Texas: a Bilingual Community,* diss., University of Texas, 1957; Robert R. Howren, *The Speech of Louisville, Ky.,* diss., Indiana University, 1958; Lee Pederson, *The Pronunciation of English in Chicago: Consonants and Vowels, Pub. Am. Dial. Soc.,* XLIV (1965); Roger W. Shuy, Walter A. Worfram, William K. Riley, *Field Techniques in an Urban Language Study,* Urban Language Series 3, Washington, D.C., 1968; Gerald Udell, *The Speech of Akron, Ohio,* diss., University of Chicago, 1966.

THE VOICING OF INITIAL FRICATIVE CONSONANTS IN PRESENT-DAY DIALECTAL ENGLISH

By MARTYN F. WAKELIN and MICHAEL V. BARRY

In this article the following counties are numbered and abbreviated in accordance with the system used in the *Survey of English Dialects*. Reference numbers on the maps and elsewhere, e.g. IV.8.9, VII.3.6, are those of the questions in the Dieth-Orton *Questionnaire.*

27	Bd	Bedfordshire
26	Bk	Buckinghamshire
33	Brk	Berkshire
36	Co	Cornwall
37	D	Devonshire
38	Do	Dorset
24	Gl	Gloucestershire
39	Ha	Hampshire
15	He	Herefordshire
28	Hrt	Hertfordshire
35	K	Kent
30	Mx	Middlesex
18	Nth	Northamptonshire
25	O	Oxfordshire
31	So	Somerset
34	Sr	Surrey
40	Sx	Sussex
32	W	Wiltshire
17	Wa	Warwickshire
16	Wo	Worcestershire
	I.o.W.	Isle of Wight
	St.E.	Standard English

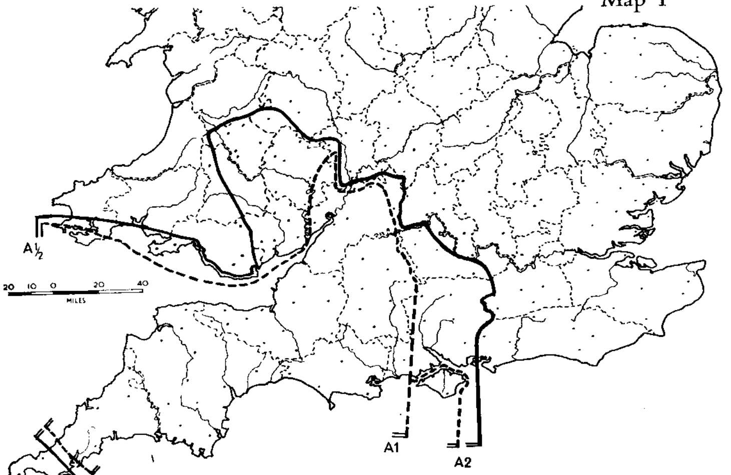
The voicing of the initial consonants [f], [s], [θ] and [ʃ] in the present-day southern dialects of England has long been a problem to linguists, and especially in respect of its origin and history.[1] It has been widely held[2] that initial voicing must have taken place before the large influx of French words in the eleventh century and after, since it is usually claimed that these have not taken part in the process, or have only done so to a limited extent. Scholars are not agreed as to whether or not the voiced sounds were present in initial position at the time of the Anglo-Saxon invasions, or whether they arose as the result of a sound-change in the OE period. No convincing conclusions can be drawn from OE orthography.

The most recent overall survey of the problem is in A. J. Ellis's *On Early English Pronunciation,* Part V, London, 1889 *(EEP),* and Map 1 below summarizes his conclusions on the voicing of initial [f], [s], and [ʃ]. His remarks on the voicing of [θ] are not very systematic, but this voicing can be legitimately inferred from his information to have taken place, either generally or sporadically, in the SW. counties. Although Ellis's information has not the precision expected of modern research methods, it may be assumed that the area indicated on the maps based on his material represents at least roughly the area in which voicing was current in his day. With the publication of the *Survey of English Dialects*[3] *(SED),* not all of which is at present in print, quite precise conclusions can be reached about the present state of the voicing of initial [f], [s], [θ] and [ʃ], and it is hoped that the large body of material collected by *SED* may in some measure contribute to a better understanding of the problem. The material from *SED* used in this article comprises both responses (rr.) given in answer to the *Questionnaire*[4] and incidental material (i.m.), the latter consisting of additional, relevant matter collected by the field-workers of *SED* while in conversation with informants, and used as ancillary to the rr. It should be noted here that use has occasionally been made of i.m. forms which do not appear in the material actually published (or to be published) in the *SED* Basic Material Volumes.

The material published in *SED* does not include recordings from Wales. However, the *Questionnaire* has been used in numerous localities there, and since A. J. Ellis shows voicing in S. Wales, it has been thought useful to include on the maps below the examples collected from this area.[5] It will be noted that examples of initial [v] occur as far north as Radnorshire.[6]

By way of comparison with the map showing Ellis's material, Maps 2-5 below, based on an examination of the relevant words collected by *SED,* are intended to give an idea of the present-day situation. For the purposes of this article, 69 words containing initial [f] were examined, 59 containing initial [s], 16 containing initial [θ], and 28 containing initial [ʃ]. These include words beginning with the initial consonant combinations *fl, fr, sl, sm, sn, sw.*[7] The object of the maps is

Map 1

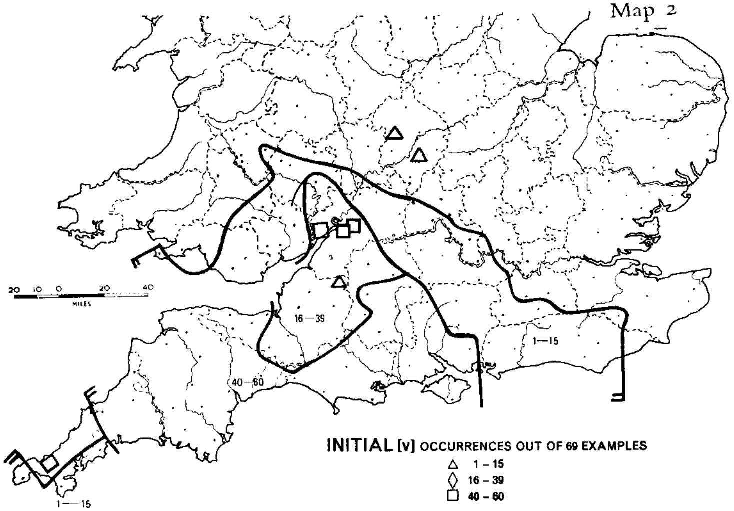


VOICING OF INITIAL f, s & sh (after A. J. Ellis)

——— OCCASIONAL VOICING OF f- & s-

– – – {A1 – A1 FREQUENT VOICING OF f-
{A2 – A2 " " " s- & OCCASIONAL VOICING OF sh-

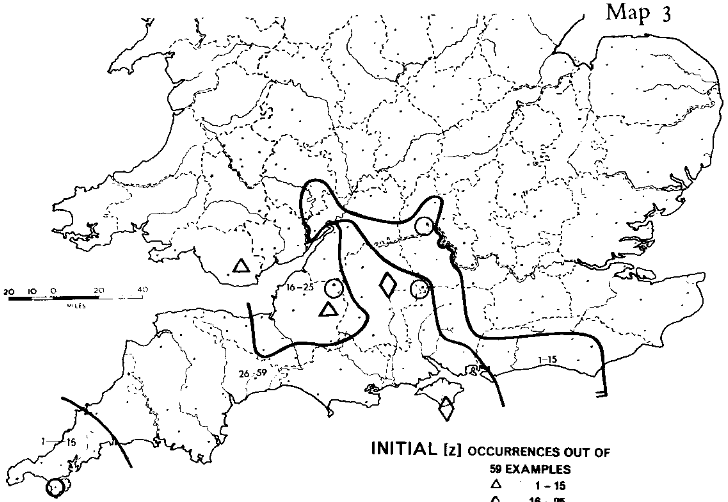
Map 2



INITIAL [v] OCCURRENCES OUT OF 69 EXAMPLES

△ 1 – 15
◇ 16 – 39
□ 40 – 60

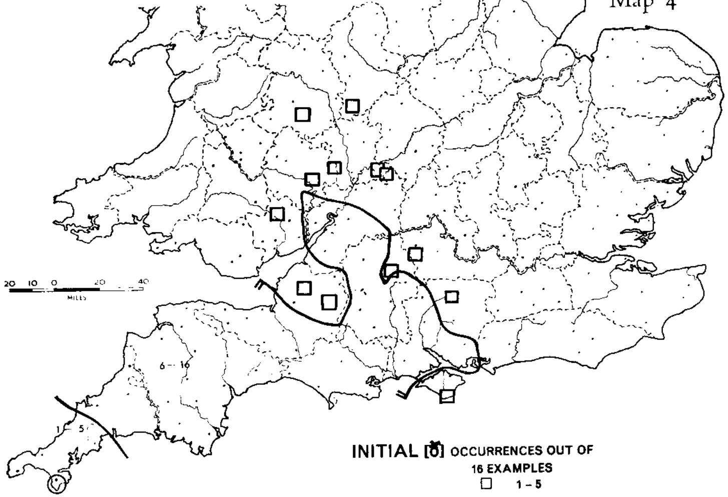
Map 3



INITIAL [z] OCCURRENCES OUT OF 59 EXAMPLES

△ 1 – 15
◇ 16 – 25

Map 4



INITIAL [ð] OCCURRENCES OUT OF 16 EXAMPLES

□ 1 – 5

to show the geographical range of the feature under consideration, and not to show the frequency of occurrence of the feature in each locality; for example, in the legend on Map 2, "16-39" indicates that out of the 69 words tested, between 16 and 39 were recorded with initial [v] on at least one occasion. In constructing these maps, i.m. has been used for any given locality only when it reveals an example of a voiced initial sound that does not occur in rr.; no special identification of the i.m. forms is made on any of the maps. Any general statistical comparison made between the maps must, of course, allow for the fact that the numbers of words investigated were not equal for each initial consonant; e.g. there were 69 words investigated for Map 2, but only 16 for Map 4. It will, however, be noted (Map 2) that initial [v] has the widest geographical distribution.

Map 2 shows that the voicing of initial [f] occurs most consistently in D and its immediate neighbours, namely NE. Co and NW. So, and also in Do, part of W, and S. and W. Ha. These are clearly the largest solid areas having the voicing of [f]. Gl, W and Ha seem to form the eastern boundary of the area of general voicing, while outside this there is a belt of occasional voicing. In the west a similar boundary may be drawn through Co from north-west to south-east.

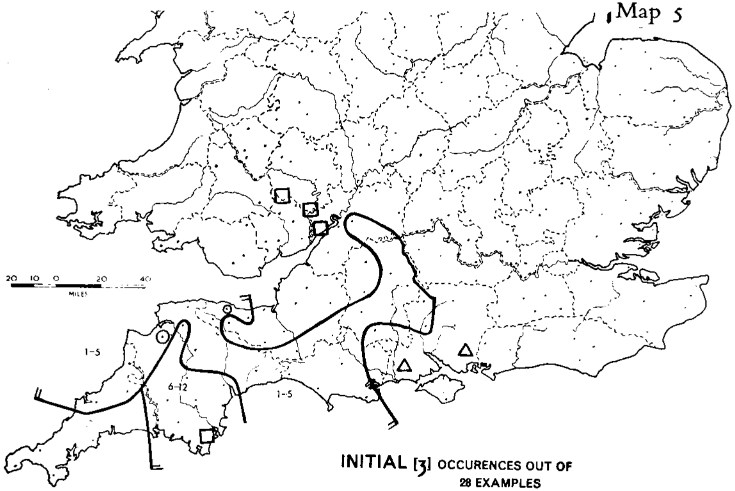
Map 3 shows that initial [s] is pronounced [z] in a rather more confined area. The areas of density are still clearly the same, but the outer belt is more thinly covered and does not extend as far to the north and east. There is, for example, nothing shown in Sr or in Wa.

Map 4 shows a more diminished area for initial [ð], as does Map 5 for initial [ʒ].

From a perusal of Maps 2-5, certain general statements can be made. Two areas of density may be said to emerge, as follows: (1) Devon, NW. So and NE. Co, (2) Do, part of W, and S. and W. Ha. The region in between is undoubtedly one characterized by voicing, but the tendency does not seem so strong—at least when considered merely on a numerical basis—as in the two adjacent areas. When the distribution is limited, e.g. in words which for some (presumably historical) reason do not seem to favour voicing, or in words with consonant combinations which react against it, the whole area of voicing diminishes until it leaves only these two focal points. Most of the maps illustrate this to a lesser or greater degree.

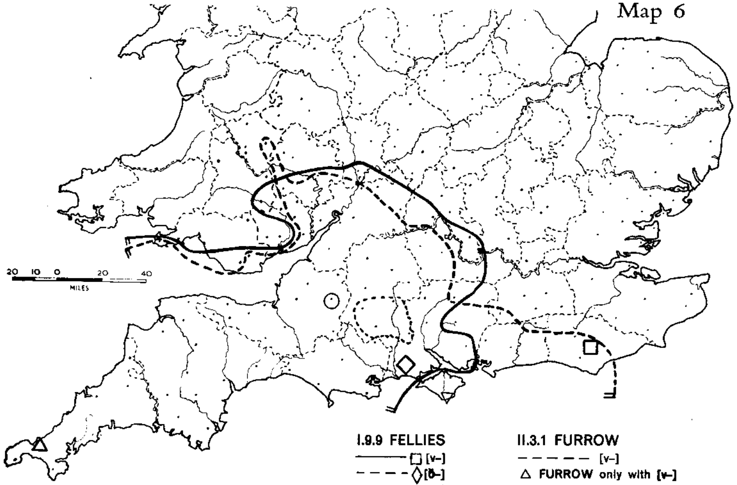
Boundary lines enclosing the area would be most suitably drawn double: an inner one would delimit the comparatively thickly-scattered area, while the outer one, further to the N. and E., would enclose the whole area. The inner NE. boundary is fairly constant, and encloses SW. Gl, most of W, and S. and W. Ha; the outer NE. boundary is not

Map 5



INITIAL [ʒ] OCCURENCES OUT OF
28 EXAMPLES
□ 1 – 5
△ 6 – 12

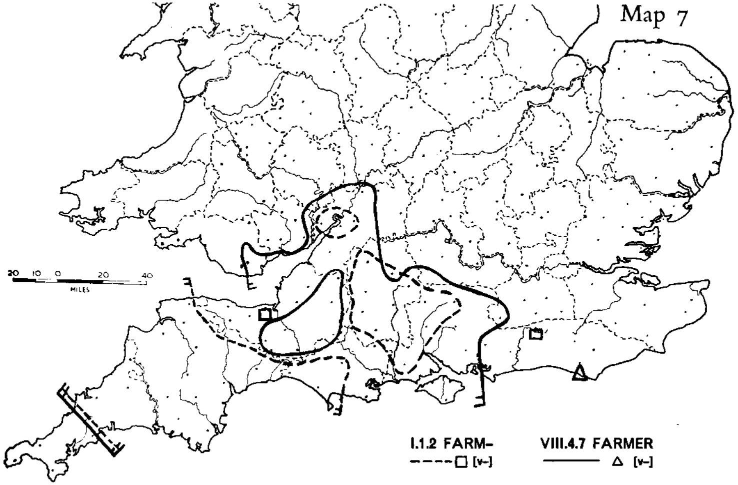
Map 6



I.9.9 FELLIES
———— □ [v–]
– – – – ◇ [ð–]
▽ [θ–]

II.3.1 FURROW
– – – – – – [v–]
△ FURROW only with [v–]

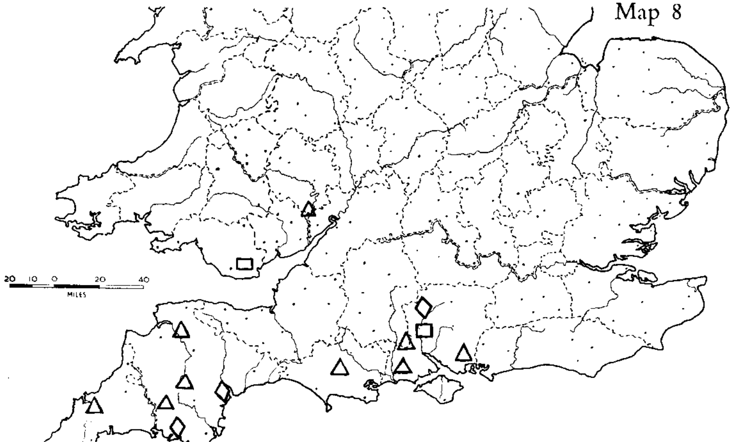
Map 7



I.1.2 FARM-
– – – – □ [v–]

VIII.4.7 FARMER
———— △ [v–]

Map 8



IV.7.8 PHEASANTS
△ [v–]

VI.13.7 FAINT
□ [v–]

◇ BOTH WORDS WITH [v–]

so constant, and its fluctuations may be studied on the maps. The SW. inner boundary usually runs north to south through Co, while the outer boundary is formed by the Cornish coast-line.

Maps 6-20 are intended to illustrate in greater detail the general statements made above. The maps make use of isoglosses as well as symbols; the principles underlying this system, which is under consideration for the proposed *Linguistic Atlas of England,* are as follows.

Within an isogloss area the locality dot indicates the occurrence of the "Leitform," i.e. the principal form within the isogloss area, within that area. The locality dot encircled by a ring—⊙—indicates the non-occurrence of the "Leitform." Where a symbol other than the ring encircles the locality dot—◬—this indicates that both the "Leitform" and another symbolized form occur. Where both the ring and another symbol occur—◬—this indicates that the "Leitform" does not occur, but another symbolized form does.

On the statistical maps—numbers 2-5—however this last convention does not apply. The occurrence here of a symbol in an isogloss area cancels the statistics given in numeral form for the relevant area.

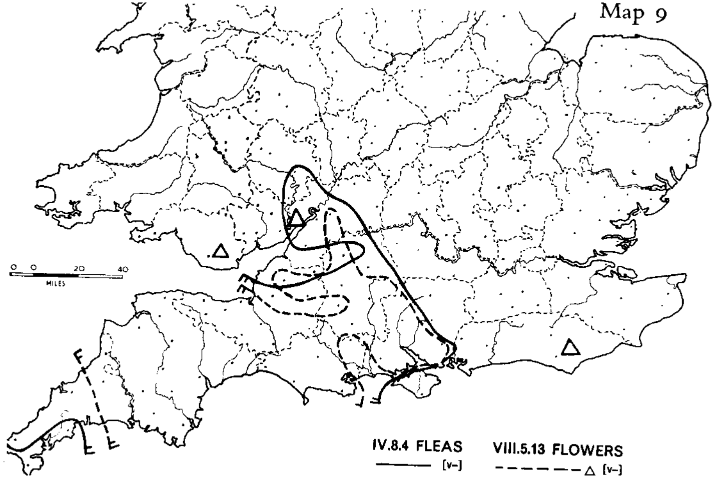
Outside the isogloss area, the locality dots are left unmarked without implication, except where the locality dot is incorporated in the top of a symbol—△—which indicates that the symbolized form occurs.

COMMENTARY ON THE MAPS

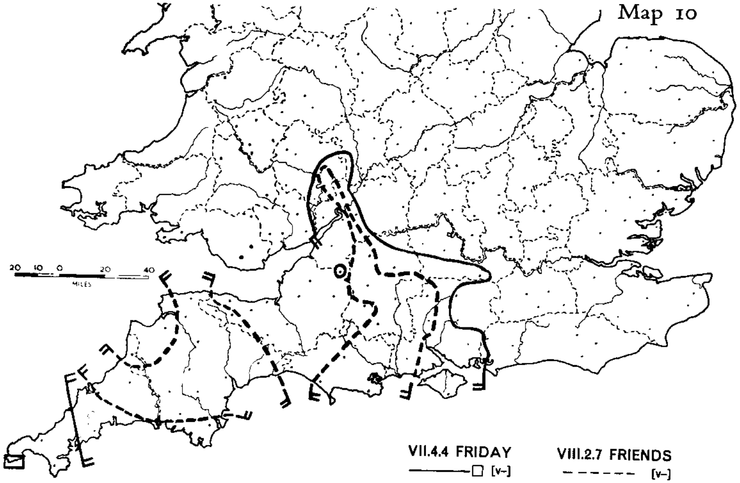
Map 6. I.9.9 FELLIES (OE felg *sg.*), and II.3.1 FURROW (OE furh). The distribution of [v] in these ancient English agricultural words is solidly spread throughout the whole of the south-west to the tip of Co, extending into mid-Wales, and with an occasional example in Sx. It will be noticed that except in the south-east, [v] in FELLIES has a slightly wider spread than in FURROW. This may possibly be accounted for by the fact that FELLIES has largely fallen into disuse in modern speech, along with the objects it signifies. This being so, [v] is preserved, unmodified by the impulse towards St.E. pronunciation which has affected more common words, e.g. FURROW. A small area in S. W with [ð] in FELLIES is to be noted: this presupposes a series [f] > [v] > [ð]. [θ] in FELLIES in Ha 7 (I.o.W.) is unexplained, but suggests that [f] has become [θ], the change presumably having taken place too late for the new [θ] sound to take part in the change to [ð].

Map 7. I.1.2 FARM- (F ferme) and VIII.4.7 FARMER (AF fermer). FARM is first attested in English in 1297 according to *OED.* The coverage on the map is smaller and not so concentrated as in FURROW

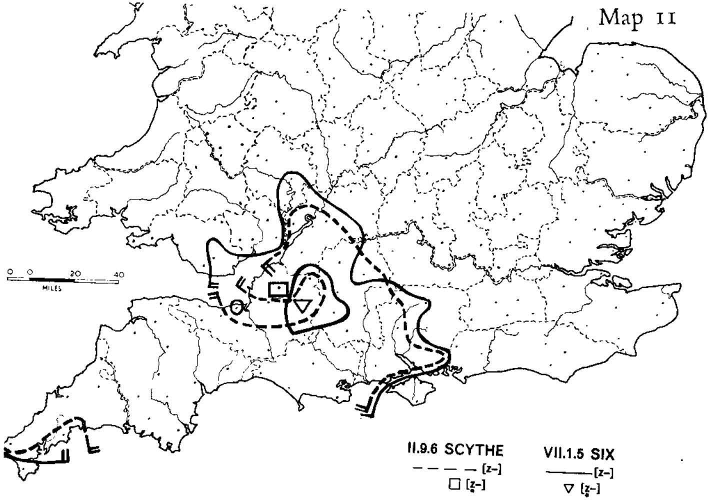
Map 9



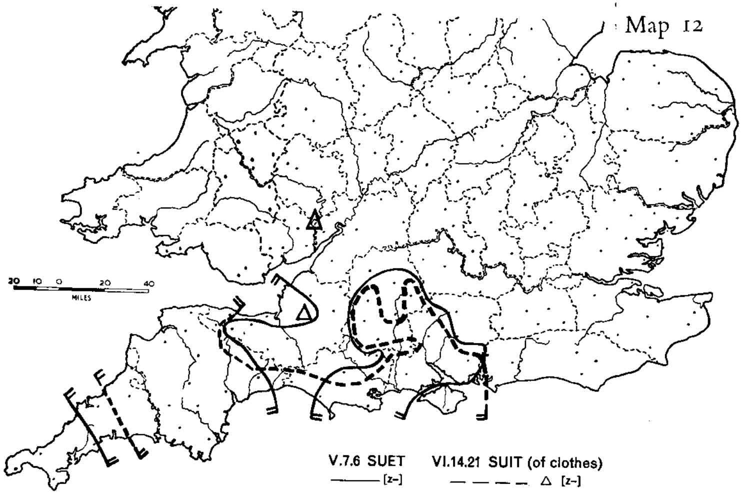
Map 10



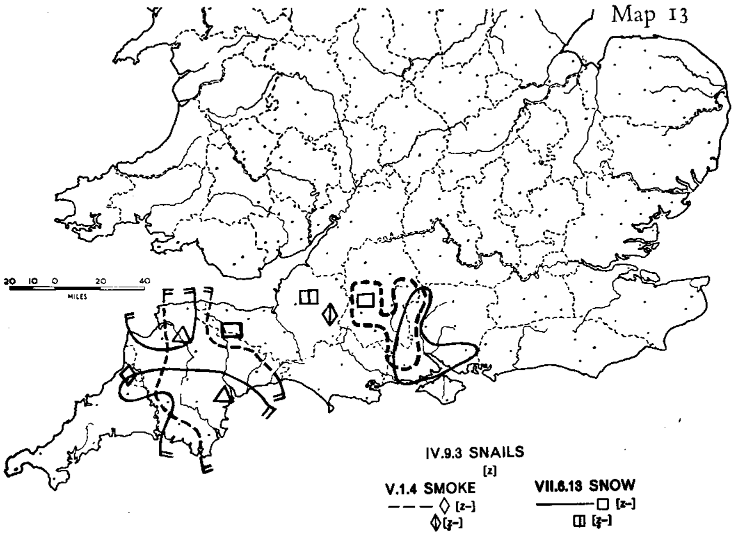
Map 11



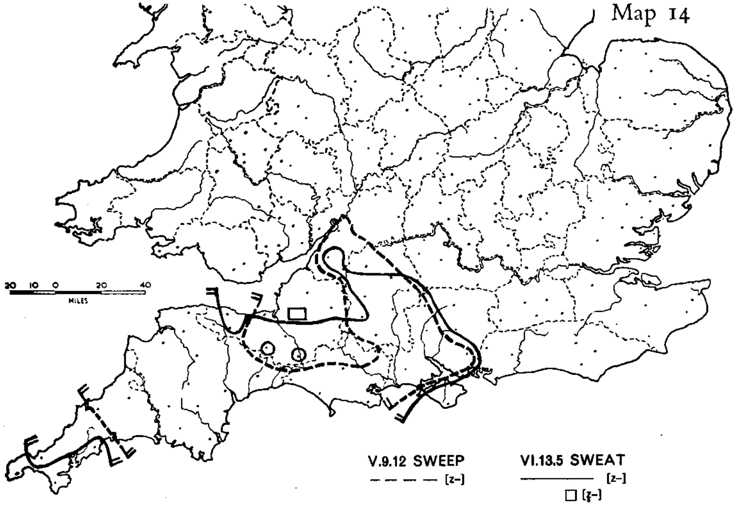
Map 12



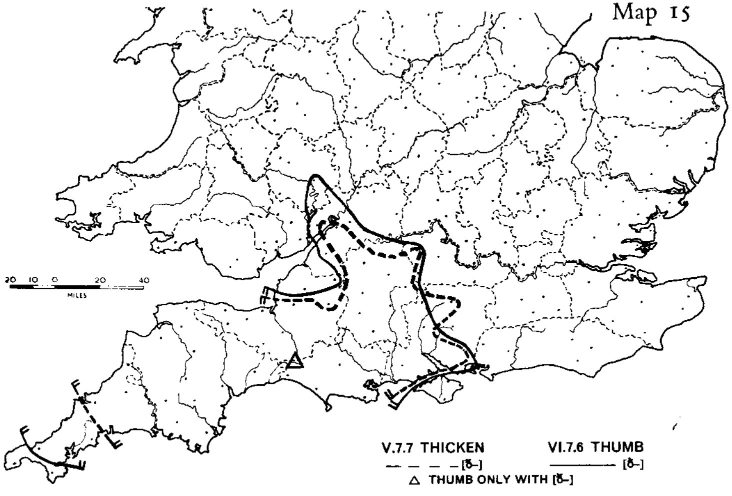
Map 13



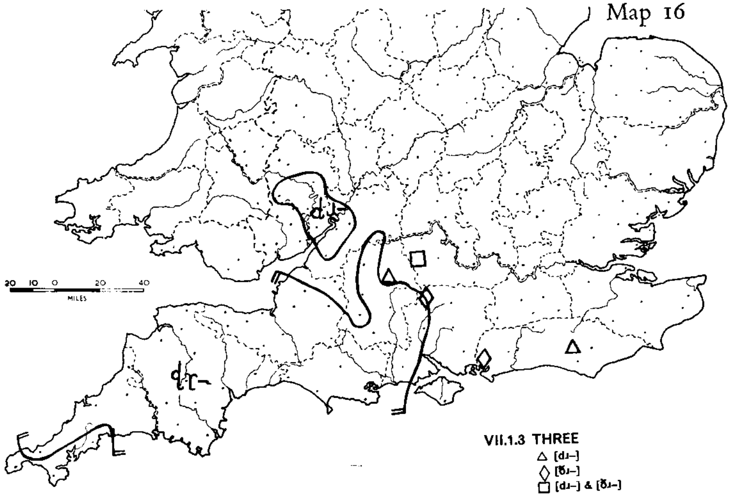
Map 14



Map 15



Map 16



and FELLIES, but FARMER (first attested in English in 1382) has a slightly wider coverage than the FARM- compounds.

Map 8. VI.13.7 FAINT *v.* (OF faint, feint *adj.*) and IV.7.8 PHEASANTS (AF fesant, fesaunt, OF fesan, *sg.*). The areas showing initial [v] in these two words are reduced much further. The first occurrence of FAINT *v.* in English is recorded by *OED* in 1300, and of PHEASANT in 1299.

Map 9. IV.8.4 FLEAS (OE flēah *sg.*) and VIII.5.13 FLOWERS (OF fleur, flur, flor *sg.*). Initial [fl] > [vl] over a somewhat wider and more concentrated area in FLEAS than in FLOWERS (first recorded occurrence in English *c.* 1200). The isolated (i.m.) example of [v] in FLOWERS in Sx is, however, worthy of note.

Map 10. VII.4.4 FRIDAY (OE frīgedæg) and VIII.2.7 FRIENDS (OE frēond *sg.*). Initial [fɹ] or [fɽ] > [vɹ] or [vɽ]. Initial [v] in FRIDAY has a slightly wider distribution. The distribution of [vɽ] or [vɹ] in FRIENDS shows remarkably well the two focal areas of voicing, with a large gap (in So) between them.

Map 11. II.9.6 SCYTHE (OE sīðe) and VII.1.5 SIX (OE sex, six, siex, syx, etc.). Initial [z] in SIX has the widest distribution of any of the [s]-words tested, extending into Glamorganshire. Both SCYTHE and SIX show a small pocket of initial [s] in NE. So.

Map 12. V.7.6 SUET (AF *suet, *sewet) and VI.14.21 SUIT (AF siwte, etc.). The two focal areas stand out. SUET is first recorded by *OED* in 1377, and SUIT (in the sense of "livery, uniform") *c.* 1297.

Although it has been impossible to show the material in map form, an examination of I.9.1 SLEDGE (MDu sleedse), V.6.10 SLICE (OF esclice, esclisse), VII.6.14 SLIPPERY (< SLIPPER *adj.* < OE slipor) and IV.9.2 SLUGS (cf. Norw. dial. slugg, sluggje *sg.*) shows that the consonant combination [sl] apparently does not assume voicing of the first element readily, and [z] in all four words has a negligible distribution. Initial [z] occurs in SLEDGE only at 37 D 7 and 39 Ha 1; in SLICE at 37 D 7 and 39 Ha 6; in SLIPPERY at 32 W 3, 37 D 7/8/10, and 39 Ha 5/6 (with initial [z̥] at 31 So 2); and in SLUGS at 37 D 2 and 39 Ha 6. The two focal areas stand out again. SLIPPERY, the only one of the four words derived from OE, has the widest distribution, with six examples. SLEDGE (first recorded in 1617, according to *OED*) and SLUG (first recorded as an animal in 1704, according to *OED*) were both late additions to the English language. A tendency for words widely in use to assume voiced initials is obviously restricted here by the initial combination.

Map 13. V.1.4 SMOKE (OE smoca), IV.9.3 SNAILS (OE snegel, snægle, etc. *sg.*) and VII.6.13 SNOW (OE snāw). As compared with the other two words, SNOW has a large incidence of initial [z]. None of the other words with St.E. [sn] which were examined have more than four examples, mostly restricted to Devon. It is difficult to see why [z] occurs so infrequently in SNAILS and so (comparatively) frequently in SNOW.

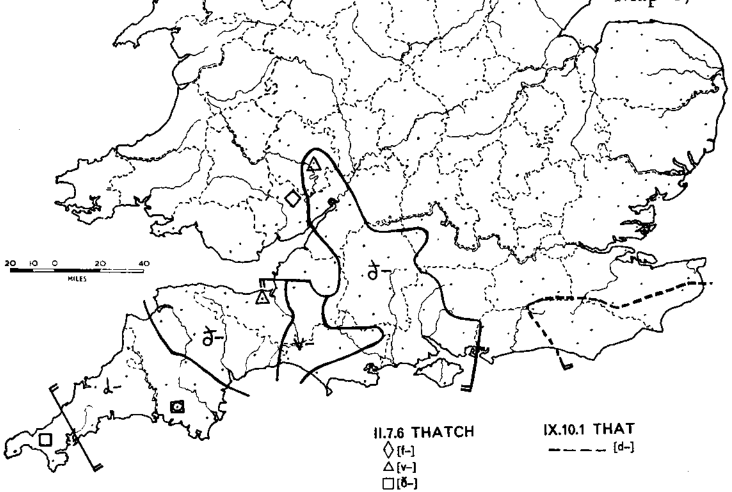
Map 14. VI.13.5 SWEAT (OE swǣtan) and V.9.12 SWEEP (ME swepe). Voicing is apparent in the combination [sw] in a much wider area than in any other [s] combination, presumably because of the semi-vocalic nature of the [w]. Nevertheless, the distribution is not as extensive as in SIX.

Map 15. V.7.7 THICKEN (< THICK *adj.*, OE þicce, + -EN) and VI.7.6 THUMB (OE þūma). There is little to be said about the voicing of initial [θ]. As already noted, the area of voicing is less extensive than that characterized by the voicing of [f] and [s]. Apart from this, it will also be seen that So again shows a gap in the north-east of the county. Although not shown here, isolated examples of [ð] occur in THURSDAY in S. Shropshire and S. Staffordshire and are perhaps remnants of what at one time may have been the northernmost boundary of the area. All the examples of words having initial [θ] or [ð] are of OE origin. The sound does not occur in French.

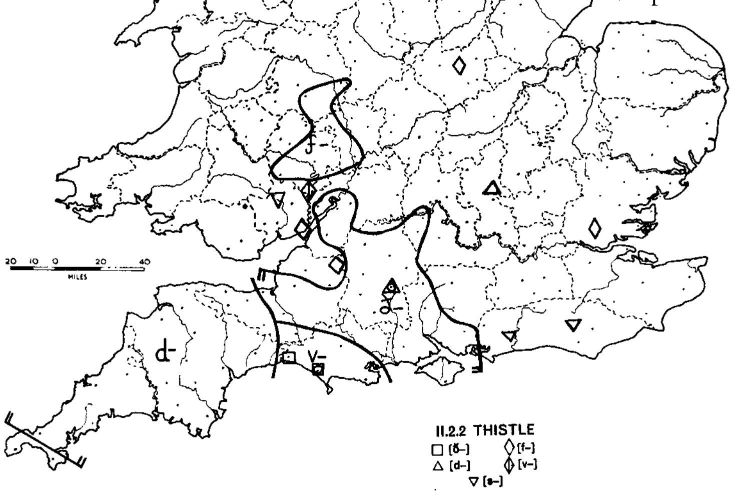
Map 16. VII.1.3 THREE (OE þrī, þrīe, þrīo, þrēo). [θ] combines only with [w] and [ɹ] or [ɽ]. There are, unfortunately, no words in THW- in the *Questionnaire*. (A)THWART meaning "diagonally" occurs, but not consistently enough to allow a map to be drawn. [θ] + [ɽ] > [ɽ] in the south-west, presumably via an intermediate stage [ðɽ], but usually remains [θɹ] in the south-east, where voicing is absent. The SW. variety of *r* is so retracted as to effect retraction of the preceding [ð], which is subsequently closed and becomes the plosive [d]. In the type [ðɹ], exemplified in W. Brk and W. Sx, the *r* is presumably not sufficiently retracted to have this effect on the preceding consonant.

Maps 17 and 18. II.7.6 THATCH- (OE þæc *n.*, þecc(e)an *v.*) and II.2.2 THISTLE (OE þistil, -el). These words are unique in having an initial [d] distribution: [d] for St.E. initial [θ] occurs in no other words investigated by *SED*. *OED* records no spellings in *d-* in either word, but in both cases initial [θ] > [d] presumably via an intermediate stage [ð]. This closure is of a different origin from the SE. change of St.E. [ð] (< [θ]) > [d], e.g. in THIS, THEY, THERE;[8] but for purposes of comparison, Map 17 also shows the contemporary distribution of [d] in the word THAT as ascertained by *SED*. [d] in THATCH is restricted to S. Devon and E. Co, and in THISTLE to D, E. Co, and NW. So. In both cases [θ] > [v] in Do, once again presumably via [ð]. The various other initial consonants are shown on the maps.

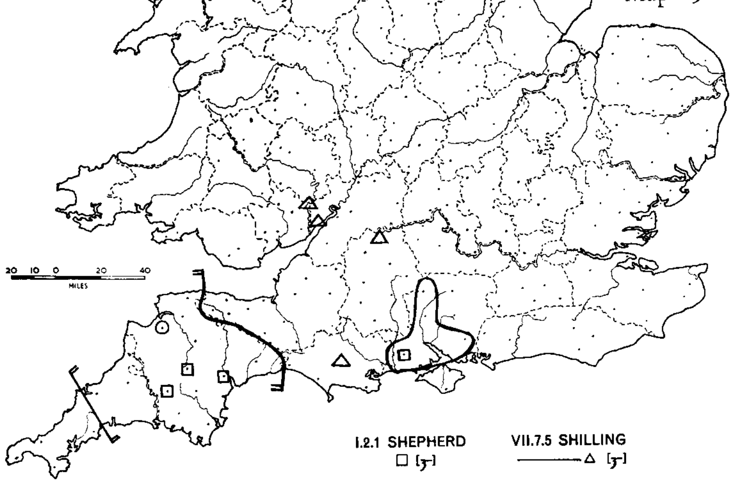
Map 17



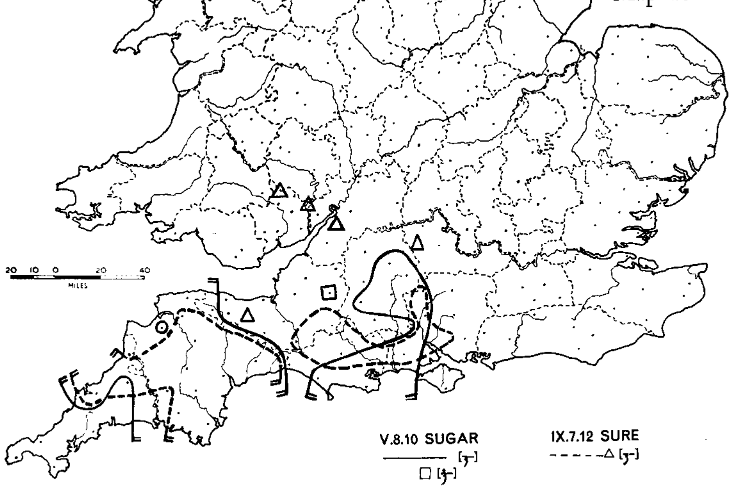
Map 18



Map 19



Map 20



Map 19. I.2.1 SHEPHERD (OE scēaphirde) and VII.7.5 SHILLING (OE scilling). The voicing of initial [ʃ] is much less consistent than the voicing of any of the other sounds considered above. In many words there is no [ʒ] sound recorded in any locality, while those words in which this sound does occur are entirely limited to D, with isolated examples in W. Ha. In all cases the examples are very scattered, though D and W. Ha seem to be focal areas. SHEPHERD, an English word, is a surprising case, presenting only four examples of initial [ʒ].

Map 20. V.8.10 SUGAR (OF çucre) and IX.7.12 SURE (OF sur-e, seur-e). It is unusual for OF loan-words to have a wider distribution of a voiced initial fricative than native words. Nevertheless, SUGAR and SURE have a wider incidence than SHEPHERD and SHILLING.

It is not the object of this paper to attempt an explanation of the rise of the voiced initial fricative consonants [v], [z], [ð] and [ʒ]. Nevertheless, a few remarks of an historical nature may be tentatively made.

It is obvious first of all that initial [f], [s], [θ] and [ʃ] tended to assume a voiced quality during (or perhaps even before) the OE or early ME period everywhere south of a line approximating to Watling Street, except perhaps in SW. Co. This is clear not only from the sporadic examples in present-day dialectal usage (see Maps 2-5), but also from the testimony of place-names[9] and the statements of glossarists.[10] The Moore-Meech-Whitehall lines[11] are thus seen to be drawn somewhat too far to the south and west. Comment must be made here on the diminution of the numbers of voiced examples west of Co, loc. 3, and the prevalence of voicing in N. and NE. Co (cf. Ellis's conclusions, shown on Map 1).[12] It is probable that the Anglo-Saxon invasion of Co took place mainly from the north-east of the county.[13] If this is so, there is a longer tradition of English in the north-east than in the west of that county; the English originally adopted by the Cornish-speaking inhabitants was presumably the West-Saxon dialect of their immediate neighbours and invaders. In remote W. Co, English penetrated more gradually, not reaching everywhere for some hundreds of years; and, as this happened probably under the influence of education, the English used was therefore a non-SW. or a modified SW. variety, in which the voicing of initial fricative consonants was considerably weakened or even non-existent. The sounds under consideration are not the only examples of what is apparently a general phenomenon: a more "standard" type of speech was noted in the extreme south-west even in Ellis's time,[14] and seems to be borne out by the evidence collected by *SED,*[15] though, of course, it is not a modern standard speech that we should expect to find here, but an archaic one.

The tendency towards initial voicing, which perhaps originated in the sentence in intervocalic positions, was probably present in the OE period in the areas under discussion since it is true, generally speaking, that French words do not seem as comfortable with voicing as the native ones, either in the ME period or in present-day rural dialects (see below). There seems to be no difficulty in assuming that the OE orthographic system would obscure the feature: OE has no special symbols for the voiced medial sounds [v], [z] and [ð], simply spelling them *f, s,* and *þ* or *ð* respectively, as in *wulfas, hūsas* and *baþian.* The absence of any symbols for the voiced medial sounds strongly suggests that the letters *f, s,* and *þ* or *ð* would likewise be made to suffice for voiced initial sounds, especially if these were a later development in OE from their voiceless equivalents. The pronunciation of OE *sc* was probably (at least in late OE) something approaching to [ʃ], but it seems doubtful whether this was voiced in medial positions, e.g. in *fiscas, wascan,* as were [f], [s] and [θ]: even if it was voiced, the voiced sound had no special symbol. The fact that FISHES and WASH, for example, still have [ʃ] in modern English (cf. WOLVES, HOUSES, BATHE) implies that OE *sc* symbolized only a voiceless sound medially, while the small distribution of initial [ʒ] in modern English southern dialects suggests that the same may be true of OE initial *sc,* namely that it symbolized only a voiceless sound, and that the voiced equivalent was later adopted in the area under discussion by analogy with initial [f], [s], and [θ]. In this connexion, it is noteworthy that initial [ʃ] is never voiced in SW. Co (see above).

As against the tendency towards voicing in initial positions, we must set the influence of St.E., especially in SE. England. The area under consideration is surrounded by large towns except in the south-west. As the evidence presented above shows, K, Sr and Sx have now almost no signs of voicing, whereas in ME the Kentish texts are distinguished by this feature more than texts from other dialect areas. Initial [v] and [z] are quite common in Sx place-names for the ME period and later. The cause of the loss of voicing in all three counties is probably due to the influence of the London dialect. It must further be borne in mind that St.E. and London influence have exerted themselves all along the S. coast as far, at least, as I.o.W.: holiday resorts and ports abound here. Further to the north and west, Oxford, Reading and Birmingham have probably assisted St.E. in bringing about the disappearance of the feature. The further one travels to the south-west, the fewer large towns there are, and the dialects of the small market towns are variants of the rural dialect of the surrounding countryside rather than different dialectal types exerting outward influence. As noted above, there may be a different reason for non-voiced initials in SW. Co, while the blank spaces on the map in So may perhaps be due to complex factors relating to settlement and population in the medieval period.

As against this general tendency—namely, the loss of voicing owing to the encroachment of St.E.—it should be noted, however, that the voicing of initial [f], [s], [θ] and [ʃ] is perhaps not entirely a recessive feature. The nineteenth-century dialectologists tell us that French words do not usually have voiced initials (see Note 16, below), and yet the evidence presented in this paper shows conclusively that some of them do now, and that the distribution is quite a wide one, e.g. those of FARM and FARMER (see Map 7). Can it be that two factors, fundamentally opposed, are at work here? On the one hand, in some cases voicing has spread since the last century, appearing now in words which, according to earlier writers, did not have it. On the other hand, conformity to St.E., which grew stronger as time went on, has worked in the opposite direction, thus bringing about the opposite effect. We thus have a complex situation, as the present article serves to illustrate.[16]

We have, in this paper, been examining *classes* of words rather than individual words, but in fact the history of each word needs to be examined individually. Who knows what reasons may have prompted FARM, a word common in agricultural vocabulary (this may be significant), to assume or retain an initial [v] and FAINT hardly ever to assume or retain it? To make matters even more complicated, it may be surmised that different reasons apply in different areas to the same words, so that, for example, we find initial [z] in SUIT (Map 12) in He 6 and also in Ha 5, but its presence in these localities may be accounted for by a number of different reasons depending on physical geography, historical considerations, social phenomena and the like. Some words, used principally by certain classes, may never have fully penetrated to the agricultural population. There is no easy answer.

Finally, it should be emphasized that the evidence—both for ME and for the present-day SW. dialects—is limited.

A concluding note on the words of French origin may not be out of place. It has often been stated[17] that French words do not appear with a voiced initial as regularly as the English ones. Indeed, it does seem that the English words have a slightly more concentrated and a wider distribution than the French, and that they extend further to the north and east of the area under discussion.

We have postulated a geographical area—the whole of the south and south-west—in which the voicing of initial [f], [s], [θ] and [ʃ] was present from early times. We may further surmise that, generally speaking, the area tended to diminish as St.E. influence encroached. The voicing receded further and further into the south-west until certain quite small regions were left as enclaves. Loan-words from French and other languages when taken into English had voicing extended to them on an analogical basis, e.g. a man who said [vu:ɽ] FURROW would presumably also say [vɛɪt] (VII.4.11, 37.7), [ve:t] (ibid., 39.1) FÊTE (first occurrence in 1745, according to *OED*);[18] that is, voicing would take place in loan-words in those areas *in which voicing was still strongly prevalent.* Where it was weakening (i.e. in the north and north-east and the south-east), borrowings retained their voiceless initial: in those areas the tendency to voicing was not still strong enough to compel the new words to conform. The ME evidence seems to be ambiguous: French words in ME may indeed be *written* with *f* and *s* but this does not exclude the possibility of their initial consonants being regularly voiced by at least some *speakers.* Words with initial *th* and *sh* (or their orthographical variants), whether containing a voiceless or a voiced initial, had to be written thus; there was no other way since distinctive letters for [ð] and [ʒ] were lacking. Nevertheless, the initial sounds were undoubtedly voiced by some speakers. Voicing may have been the norm with some speakers and not others, and yet it seems doubtful whether there was anything like conformity, even in the south-west where the tendency to voice was strongest. The histories of pronunciation and spelling by no means coincide at every point, and obviously the ME documents do not tell the whole story.

NOTES

We acknowledge with pleasure permission to use unpublished material from the archives of the Institute of Dialect and Folk Life Studies of Leeds University. Our thanks are due to Mr Kenneth R. Lodge for preparing the maps, and to the Editors of *Leeds Studies in English* for much helpful advice with regard to the reproduction of the maps.

[1] For a recent theory, see W. H. Bennet, "The Southern English Development of Germanic Initial [f s þ]," *Language*, 31 (1955), 367-71, who postulates an Anglo-Saxon origin derived from Low Franconian. See also H. Kurath, "The Loss of Long Consonants and the Rise of Voiced Fricatives in Middle English," *Language*, 32 (1956), 435-45.

[2] E. Jordan, *Handbuch der mittelenglischen Grammatik, Erster Teil, Lautlehre* (Heidelberg, 1925), §§208, 215; K. Luick, *Historische Grammatik der englischen Sprache, Erster Band*, II. Abteilung (Stuttgart, 1929-40), §703; K. Brunner, *An Outline of Middle English Grammar*, transl. G. Johnston (Oxford, 1963), §36, n. 1; A. J. Ellis, *EEP*, V, 38; J. Wright, *The English Dialect Grammar* (Oxford, 1905), §§278, 320; J. Kjederqvist, *The Dialect of Pewsey* (London, 1903), pp. 94-6 (following Ellis); Bennet (see Note 1 above). B. Widén, *Studies on the Dorset Dialect* (Lund, 1949), p. 79 n., states, "It is probable that the sound-change which made initial *f* become *v* was still at work at the time of the great influx of AN words into the dialect." See also F. T. Elworthy, *The Dialect of West Somerset* (E.D.S. 1875), pp. 68-74.

[3] H. Orton and E. Dieth, *Survey of English Dialects, Basic Material* (Leeds, 1962-). The relevant volumes are: IV (Southern), ed. Harold Orton and Martyn F. Wakelin (Leeds, 1967-68) and II (West Midland), ed. Harold Orton and Michael V. Barry (Leeds, 1969-).

[4] Eugen Dieth and Harold Orton, *A Questionnaire for a Linguistic Atlas of England* (Leeds, 1952), reprinted in revised form in the *Introduction* to *SED* by Harold Orton (Leeds, 1962), pp. 39-113.

[5] This material was collected by Mr D. R. Parry, using the Dieth-Orton *Questionnaire*, while preparing a dissertation for the degree of M.A., and is deposited in the archives of the Institute of Dialect and Folk Life Studies at Leeds University. See D. R. Parry, "Studies in the Linguistic Geography of Radnorshire, Breconshire, Monmouthshire and Glamorganshire," unpublished M.A. dissertation, Leeds University, 1964.

[6] We have not considered Southern Ireland. The feature probably still exists in some dialects there; see *EEP*, V, 26-31 (records voicing in the extreme south-east of Wexford), and P. L. Henry, "A Linguistic Survey of Ireland, Preliminary Report," *Lochlann*, I (1958), 53-208.

[7] It does not include words beginning with [θɹ], since this consonant cluster has a development additional to the simple voicing of [θ] (see p.56 , above). Words beginning with [s] + voiceless consonant, e.g. [sp], were not tested, although the [s] in these combinations is very occasionally voiced or partially voiced, as is also sometimes the consonant following it. Note, for example, the following from *SED:* [zb] in SPOKES, I.9.6, 37.7; [zb̥] (by the side of [z̥p] 37.10) in SPIDER, IV.8.9, 37.2; [z̥d] in STITCH, V.10.4, 39.1; [ztɹ] and [zdɹ] in STRAIN, V.5.2, 33.3 and 39.7, respectively; [zbɽ] and [zb̥ɽ] (by the side of [zpɽ] 31.4) in SPRING, VII.3.6, 37.7 and 38.4, respectively. The full list of words tested is given at the end of this article.

[8] Initial [θ] > [ð] in unstressed words, according to E. J. Dobson (*English Pronunciation 1500-1700*, Vol. II, Oxford, 1957, §360) in the fourteenth century, and [ð] was then extended to stressed forms. The change of [ð] to [d] in these words must, therefore, be subsequent. Dobson further notes (*op. cit.*, §374) that Bulloker (*c.* 1530-*c.* 1590) describes a change of initial *th* (i.e. of southern [ð]) to [d] in E.Sx and K in *that, thorn*, and *those*. In all localities where *SED* recordings were made, St.E. [ð] appears to be rapidly ousting the older [d].

[9] The evidence of place-name spellings (field-names were not consulted), as revealed by the volumes of the English Place-Name Society, is confined to the voicing of initital [f]. Insofar as this can be considered representative, it confirms the conclusion that voicing has gradually receded from the east. There is no orthographical evidence for voicing in K after 1481, according to J. K. Wallenberg, *The Place-Names of Kent* (Uppsala, 1934), though it is known to have once been widespread. Comparatively few examples are recorded by the EPNS in Sr and Mx, where the last examples are noted in 1675 and 1480, respectively, with the notable exception of Vauxhall (< Faukeshale), which only has *v* from 1719 onwards. Perhaps, therefore, voicing disappeared in Mx place-name pronunciations about the same time as it did in K, but persisted longer in Sr, south of the Thames. This persistence is much more evident in Sx, where *v* is recorded often as late as the eighteenth or nineteenth centuries, and in seven instances is preserved up to the present day. *V* is very rare in the SE. Midlands: Hrt has one undated example, and Bk has one dated 1493. No examples are recorded for Bd, while Nth has two, one being still in use. *V* occurs in Essex occasionally, in one instance as late as 1480. Further west, Wa has three, the latest being 1594, and Wo five, one of which was preserved as late as 1830. No evidence is available for Brk, and W. H. Duignan, *Notes on Staffordshire Place Names* (London, 1902), gives no examples for that county. The orthographical use of initial *v* for [f] in place-names seems therefore to have persisted widely only in Sx and Sr until the seventeenth century, and only in Sx into

the eighteenth and nineteenth centuries. In the eastern half of the West Midlands, as disclosed by spelling evidence, Wo is the only county with any appreciable tendency towards voicing of initial [f]. The absence of any spellings except those in *v* seems to suggest that the voicing of initial [f] was more firmly grounded than voicing of the other fricative consonants. No exploration of place-name material has been made by us in the SW. counties, but only in the "fringe" area. See B. Sundby, *Studies in the Middle English Dialect Material of Worcestershire Records* (Bergen-Oslo, 1963), pp. 201-7, for evidence of ME voicing in Wo.

[10] For example, T. Sternberg, *The Dialect and Folk-Lore of Northamptonshire* (London, 1851), claims various "West Country" characteristics for the SW. Nth speakers, including the "interchange" of [v] and [f], the "retention" of [z] for [s], and the "substitution" of [d] for [ð]—"though but slightly, in comparison with the usage prevailing in the more Southern provinces" (p. xii). Major B. Lowsley, *A Glossary of Berkshire Words and Phrases* (E.D.S., London, 1888), p. 4, states that initial [f] is always pronounced as [v].

[11] The Moore-Meech-Whitehall line for f/v is drawn from the Thames estuary through Mx and the southern tip of Hrt, to the south of Bk, through the centre of O, the NE. tip of Gl, the centre of Wo, and ends in the extreme south-west of Shropshire. The position of this line is possibly due to the fact that it relies upon many readings from fifteenth-century texts, when St.E. influence was already spreading the use of [f], [s], [θ] and [ʃ].

[12] Locs. 4 and 5, which are obviously "border" locs., yield examples of voicing, out of the respective totals of 69, 59, 16 and 28, as follows:

Loc. 4 [v]— 14 [z]—9 [ð]—3 [ʒ]—0
Loc. 5 25 12 3 0

It will be noted from this that loc. 4, in the south, usually yields fewer examples than loc. 5 in the north.

[13] For an exposition of this theory, see W. G. Hoskins, *The Westward Expansion of Wessex* (Leicester University Press, Occasional Paper No. 13, 1960).

[14] See *EEP, V*, 171.

[15] For example, the typical D [Y(:)] sound, the modern reflex of ME. $\bar{o}_1$ in words like FOOD, BOOK, gives way to a more "standard" type [u:] or [ɷ] from the middle of Co to the extreme south-west.

[16] Our colleague, Mr Stanley Ellis, has drawn our attention to the fact that A. J. Ellis, *op. cit.*, makes no reference to the voiced pronunciation of the final affricate in the So form UCH (= I, 1st person sg.), but that [ʌdʒ] has been recorded on a tape-recording of an informant from Merriott, So loc. 13. This may be an example of another type of voicing which, although absent in the nineteenth century, has been adopted by some speakers since.

[17] See Note 2 (above). If voicing is not altogether a recessive feature, however, some French words may not have given up voiced initial consonants, but actually adopted them in the last hundred years; cf. above, p. 13.

[18] There are other examples in *SED*: thus OLD-FASHIONED (first rec. *OED* 1653) occurs with [v] in the second element at V.6.6, 32.5; [z] in SOFA (first rec. *OED* 1625) occurs at VIII.7.7, 37.10.

Complete list of words examined

Note. Where frequency of occurrence warranted the inclusion of a word which is not a key-word in the *Questionnaire*, the key-word is given below in brackets following the word actually used. Some key-words, although beginning with a relevant initial consonant, were not included since the questions concerned were answered by a variety of rr. differing from the key-word.

Words containing initial [f]
Faggot(-wood) (Kindling-wood), Faint, Fallow-land, Farmer, Farmstead, Farmyard, Farrow, Fart (To break wind), Farthings, Father, Fault, Feed (III.3.1 and III.5.1), Feet (VI.10.1 and VI.10.10), Fellies, Fern, Fester, Few (VII.1.19 and VII.8.21), Fields, Fifth, Fight, Filly, Find, Finger, Finish, Finished, Fire, First, Fist, Fitch, etc. (Pole-cat), Five, Flap, Fleas, Fledged, Flies, Flitch, Flood, Floor, Flour, Flowers, Foal, Fog, Fool (April fool), Foot, Ford, Forehead, Forelock, Forks, Fortnight, Forty, Forwards, Found *p.t.*, Found *p.p.*, Four, Fowls (Hens), Fox, Freckles, Friday (VII.4.4), Friends, Frogs, From, Front, Frost (Hoar-frost), Furrow, Further, Furze (Gorse), Pheasants.

Words containing initial [s]
Cinders, Sack, Saddle, Salting-trough, Saturday, Saw *p.t.*, Saw-dust, Sawing-horse, Scythe, Sea-gull (Gull), Second, See, Seedlip (Sowing-basket), Seesaw, Seven (VII.1.6 and VII.5.4), Sew, Sexton, Sight, Silver, Sit, Six, Sixpence, Slaughter-house, Sledge, Slice, Slide, Slip (III.1.11 and III.4.6), Slippery, Slope, Slugs, Slush, Smoke, Snails, Snead (Shaft of scythe), Snore, Snout, Snow, So, Some, Something, Son, Soot, Sort (Kind, VII.8.16 and VII.8.17), South, Sow, Such, Suck, Suet, Suit *n.*, Suits, Sun, Swath, Swear, Sweat, Sweep, Sweets.

Words containing initial [θ] (words beginning with *thr-* are excluded; see Note 7 above)
Thatch, Thatching, Thatcher, Thaw, Thicken, Thigh, Thimble, Third, Thirsty, Thirteen, Thirty, Thistle, Thousand, Thumb, Thunder, Thursday.

Words containing initial [ʃ]
Chemise, Shaft (I.9.4), Shafts (I.9.4), Shall (IX.4.2), Shan't, Share, Sheaf, Shear, Shears, Sheaves, Sheep, Sheepskin, Shelf, Shell, Shepherd, Shilling, Shirt, Shoe, Shoes, Should, Shouldn't (IX.4.8 and IX.4.9), Shoulder, Shovel, Shut, Shy, Sugar, Sure.

A DIACHRONIC-STRUCTURAL ANALYSIS OF A NORTHERN ENGLISH URBAN DIALECT*

By WOLFGANG VIERECK

Linguists as well as non-linguists have nowadays come to accept the fact that "local English dialects are not simply Standard English badly pronounced; they are varieties of speech with a pedigree as good as that of Standard English, which is simply one of the English dialects which, for various non-linguistic reasons, has acquired greater prestige than the other dialects."[1] When dealing with dialects, it is also important to notice that "a language can change and develop differently in different parts of the country, and some of its older features can remain in some parts whilst dying out in others."[2] Much has been said about the future of dialects. There is no doubt a certain truth in what seems to be a unanimously shared dictum, namely that dialects are dying out. Yet the time within which this is going to happen has been exaggerated by many.[3] There will always be differences in speech to observe, and it is therefore much more appropriate to say that the nature of dialect will change and that this change is already taking place.

Dialect-speech in the traditional (European) sense is, of course, still best preserved in rural areas, whereas in towns it is exposed to various influences which undermine its traditional character. We refer here to education, to mass media—radio, television, and film[4]—and to the whole linguistic climate of a large commercial centre. We should mention, however, that these influences are making themselves more and more felt on the rural dialects as well.

The following is a historical-structural study of the vowels of accented syllables of an urban area: Gateshead (Co. Durham).[5] Since it is urban, it has not been studied by the *Survey of English Dialects*.[6] As regards the two-dimensional structural approach of the analysis, this can be considered a fairly recent innovation in the field of dialectology.[7]

Gateshead, which forms part of Tyneside, has been subject to a change of population lately, since a great number of people have poured into this area from other parts of the country. It is, therefore, extremely important for the proper understanding of Gateshead, as well as any other urban dialect, to study its traditional local features, or the survivals of them, before it is too late.

Basically, our approach is the same as that made by the *Survey of English Dialects*, i.e. we have sought for the oldest features still extant. Furthermore, the speech patterns of the lowest social classes are here taken as representative of the whole urban community. The social composition of the population of Gateshead completely justifies this, as 89.4% of the occupied and retired males belong to social Classes III, IV and V, and only 10.6% to the highest two.[8] Had the composition of the population been different and had it been the aim to investigate the speech patterns of the whole community, then, of course, it would have also been necessary to follow a different procedure.

The survey outlined here shows the development of Middle English (ME) short and long vowel phonemes as well as diphthongs in the living dialect[9] as compared with the Standard Modern English development.[10] Only the most important pre-ME sources have been mentioned. As is well known, the phonemes of Old English are a rather controversial question today.[11] In this survey, Standard Modern English words are given as examples for every period. Letters between slant lines represent ME and Modern English phonemes (Received Pronunciation [RP] as well as dialect).[12] Only the "normal" development and the most significant exceptions have been stated.

SHORT VOWELS

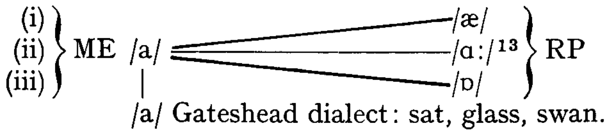
ME /a/

SOURCES:

1. (i) Old English (OE) *æ* (sat), OE *a* (hammer), OE *ea* (flax); Old Norse (ON) *a* (anger); Old French (OF) *a* (anguish); OE *a* before intervocalic *r* (marry);

   (ii) OE *a, æ* and OF *a* before fricatives and /n/-clusters (staff, glass, path, dance, answer);

   (iii) OE *w* before *a, æ* (swan, was).



Since the dialect has in each case the same vowel as in ME, we must assume that it has remained at the ME stage and has never made any of the developments which have given us the present RP phonemes.

2. ME /ar/ We can assume that in preconsonantal and word-final position the same development has taken place in RP and the dialect, yielding /ɑ:/ in both cases (as in hard, far). The ME sequence first changed to /aə̯/ and then became the new phoneme at the end of the eighteenth century. It has remained unchanged in RP as well as in the dialect up to the present day. It is also important to note that in RP 1 (ii) and 2 have merged, whereas they are kept distinct in the dialect. In the latter the vowel is usually burr-coloured.

ME /e/

Sources:

OE *e* (west), OE *eo* (seven), OE *ē* (bless), OE *ēo* (friend), OE *ǣ* (cleanse), OE *ēa* (left); OF *e* (jest).

ME /e/ occurs as /ɛ/ in RP as well as in the Gateshead dialect. Both speech forms have therefore developed in the same way.

ME /i/

Sources:

OE *i* (sing), OE *y* (hill), OE *e* (link), OE *ī* (grist), OE *ȳ* (fist); OF *i* (issue).

In RP and the dialect ME /i/ has become /ɩ/. However, it must be noted that whereas ME /i/ before *ht* appears as /ai/ in RP, it has remained at the early Modern English stage in the dialect, in which (about 1500) ME /ix/ merged with ME /i:/. Examples: night, right, sight, light, which appear in the dialect as /ni:t, ri:t, si:t, li:t/. But the fluctuation in pronunciation must not be neglected. Variants with /ai/ in these words are probably due to the influence of RP.

ME /o/

Sources:

OE *o* (lot), OE *ō* (gospel); OF *o* (rock).

Here again we find the same development both in RP and the dialect: /ɒ/. Before *ng* OE /a/ was lengthened and became ME /ɔ:/ in the South and /a:/ in the North.[14] Both forms were later shortened. This is documented by the fact that in RP we find the southern "normal" development, which is /ɒ/ in words like long, wrong, whereas in the Gateshead dialect ME /a:/ merged in these cases with ME /a/ and remained /a/ (see also ME /a/). However, RP pronunciations are becoming more frequent in this dialect area now and are gradually replacing the original feature.

ME /u/
Sources:

1. OE *u* (nut), OE *y* (much), OE *ū* (dust, husband); OF *u, o* (button, supper), OF *u, ui* (judge, usher).
2. OE *u* (pull, full); OF *ou, ui* (bushel, push); chiefly between a labial and /l, š/.

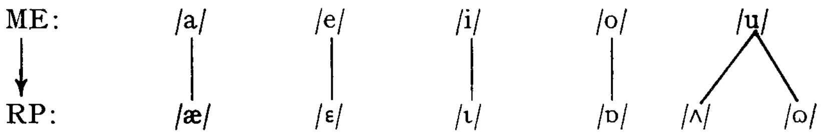
In RP 1 and 2 developed to /ʌ/ and /ɷ/ respectively. Except in the positions outlined in 2, ME /u/ was gradually unrounded and lowered in Standard English during the first half of the seventeenth century. In the dialect, however, this distinction is not made. Here ME /u/ remained /ɷ/ in both groups. Thus the phonemic split has not taken place.

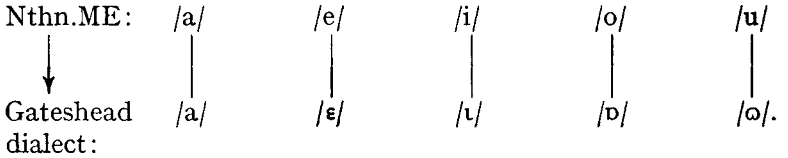
ME /er, ir, ur/ (in preconsonantal and final position)
Sources:

1. ME /er/ OE *eor* (earth); OF *er* (herb).
2. ME /ir/ OE *ir* (church), OE *ri* (bird), OE *yr* (first).
3. ME /ur/ OE *ur* (curse), OE *yr* (worm), OE *eor* (work); OF *or, our, ur* (curtain, fur, nurse).

The development of these sequences into RP and the dialect has only been the same insofar as ME /er, ir, ur/ merged in both in early Modern English in /ʌr/. This merging took place shortly after Shakespeare's time. Later, however, RP and the dialect took a completely different course: /ʌr/ became /ɜ:/ in RP. This change is parallel to that of ME /ar/ via /aə̯/ to RP /ɑ:/ in the same positions. The present-day dialect, however, has /ɔ:/ in all these cases because of a different development of /r/ in this region. We have here an instance of a burr-modified vowel.[15]

The most important development of the ME short vowels into RP as contrasted with the dialectal development is shown schematically in the following tables:

(a)


(b)


LONG VOWELS AND DIPHTHONGS

As regards the ME long vowels and diphthongs and their development into RP and the dialect, the situation is much more complicated. Considerable changes, resulting in a number of phonemic mergers, took place mainly between 1350 and 1600, but phonemic changes also occurred later.

ME /a:/
SOURCES:

1. OE *a* (spade, bake, made, name, ape, hate, lake), OE *æ* (blade, late, grave), OE *ea* (gate); ON *a* (cake, flake); OF *a* (date, gable).
2. OE *ā* (stone, bone, home, boat, goat, road, oak, pope, loaf, most, soap, whole).

The "normal" development of ME /a:/ into the dialect is /jɛ/. This is true of the above two groups and is to be seen today in the pronunciations /bjɛk, kjɛk, mjɛd, njɛm, spjɛd, gjɛt/ "bake, cake, made, name, spade, gate" (group 1) and /stjɛn, bjɛn/ "stone, bone" (group 2).

The standard language took a different course. In the first group ME /a:/ merged with ME /ai/, finally yielding /ei/ in RP today. In the dialect, however, this phonemic merger did not take place. In the words listed as belonging to group 1 above we find, in addition to the regular dialectal /jɛ/, pronunciations with /e:/ today, resulting from a substitution of earlier Standard English /ei/ (see ME /ai/). In the following words belonging to the same group Standard English influence has completely replaced the genuine dialectal development: blade, ape, hate, flake, lake, late, grave, date, gable. They are pronounced only with /e:/ in the dialect today.

Group 2: North of the Humber-Ribble line OE *ā* remained unchanged and merged with ME /a:/, thus quite normally yielding /jɛ/ in the dialect (as above). In the South, however, OE *ā* became ME /ɔ:/ which, in turn, normally developed to RP /ou/ (see ME /ɔ:/ and ME /ou/). Thus in the standard language "snow" and "stone" merged in /ou/, whereas they are kept distinct in the dialect, in which they are represented by /ɑ:/ and /jɛ/ respectively. Apart from the pronunciation /jɛ/ in "stone, bone" and "home" we can also hear an /o:/ substitution in the dialect today. This is an earlier form of RP /ou/. Owing to Standard English influence /jɛ/ seems to be dying out gradually. The following words would occur with /jɛ/ in Gateshead if regularly developed; they are, in fact, always pronounced with /o:/: boat, goat, road, oak, pope, loaf, most, soap, etc. /e:/ and /o:/ occur where the genuine dialectal development has been replaced by Standard English-influenced forms. To determine this with absolute certainty in every case it would be necessary to investigate the syllable structure in ME. To take an example: contrary to the present-day situation, were the initial consonant clusters /blj/, /flj/, and /grj/ possible at all at that time in the dialect (and RP)? If so,they were probably rather unstable. If not, a different development must be assumed. What has been said here also applies, *mutatis mutandis*, to cases mentioned under the different developments of ME /o:/.

ME /ai/
Sources:
OE *æg* (day, slain), OE *ǣg* (clay), OE *eg* (play, rain), OE *ēg* (hay); OF *a* before /nǰ/ (change, strange), OF *ai* (bay, plain).

In RP and the dialect the first element of ME /ai/ was lengthened and raised, while the second became weaker and was finally absorbed by the first. The result was /e:/, the form occurring in today's dialect. In RP, /e:/ was later diphthongized, i.e. in the early nineteenth century, and became /ei/. In this case, therefore, the standard language developed further, whereas the dialect has remained at an earlier stage. It is also worth noting that, in RP, ME /ai/ and ME /a:/ merged in /e:/, today yielding /ei/. In the dialect, however, both phonemes are kept distinct (see ME /a:/).

ME /au/
Sources:

1. OE *ag* (saw, law), OE *aw* (claw), OE *āw* (thaw), OE *ēaw* (raw, straw).
2. OE *ea* (walk), OE *æ* (small); ON *a* (call); OF *a* (false). Shortly after 1500 ME /a/ before /l/ was diphthongized to /au/.
3. OE *āw* (blow, know, snow), OE *āg* (own), OE *ēaw* (show).

The second element of ME /au/ was weakened and finally dropped, whereas the first was lengthened and retracted, yielding /ɑ:/ in the standard language and the dialect. In the latter this is the form we usually encounter today (in groups 1, 2, and 3). Thus ME /au/ is levelled with ME /ar/ (+ cons.) in Gateshead speech. In the standard language /ɑ:/ developed further in groups 1 and 2, was raised and finally became /ɔ:/. Today, however, the RP phoneme /ɔ:/ is gradually replacing the dialectal /ɑ:/.

In group 3, the basis for the RP development was southern ME /ou/, which first became /o:/ and was later diphthongized to /ou/. In the dialect /o:/ is today increasingly being substituted for the "normal" dialectal /ɑ:/ in words belonging to group 3. In "show" we recorded only /o:/. This, again, must be attributed to the influence of Standard English.

Before *ht*, ME /au/ has remained /au/ in the dialect, but not in RP where it developed to /ɔ:/, as in taught, slaughter (OE *āh, ēah*). Forms influenced by Standard English, however, are becoming more and more frequent in the dialect now.

Around 1500, ME /ou/ before /x/ merged with /au/, remained as /au/ in the dialect, but developed further to /ɔ:/ in RP (see above). Examples: daughter (from OE *o*), brought, thought (from OE *ō*). "Fought" (from OE *o*) was recorded only as /fɔ:t/ in the dialect, a form no doubt due to the influence of RP, which is making itself more and more felt here, too.

ME /e:/

SOURCES:

OE *ē* (field, shield, feet, bleed, meet, steeple, he), OE *ēo* (deep, fleet, cheek, tree, see), OE *ǣ* (needle, eel, seed), OE *y* (evil), OE *i* (week); OF *ē* (degree, agree), OF *ie* (brief, piece).

ME /e:/ had the same development in the dialect as in RP. In such words as those mentioned above it was raised already in late ME and became /i:/ in both speech forms.

ME /ɛ:/ merged with ME /e:/, a development common to the standard language and the dialect.

Two other developments of ME /e:/ which will have to be mentioned here are shared by RP and the dialect:

1. ME /e:/, when shortened before the raising to /i:/, appears as /ɛ/ in RP and the dialect. Examples: wet, let (from OE *ǣ*).
2. ME /e:/, when shortened after the raising to /i:/, appears as /ɩ/ in the dialect and RP. To this category belong: sick (from OE *ēo*), rick (from OE *ēa*), strip (from OE *īe*).

ME /ɛ:/

SOURCES:

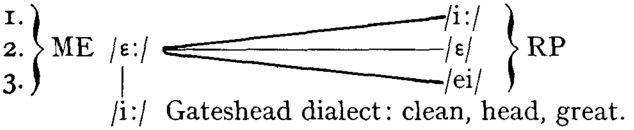
OE *ǣ* (reach, clean, deal, wheat), OE *ēa* (leap, leaf, team, cheap), OE *e* (eat, steal, speak); OF *e, ai* (cease, treat, peace, please).

In the above words the development in the standard language and the dialect has been the same. ME /ɛ:/ was first raised to /e:/ in early Modern English and then to /i:/ in the early eighteenth century, thus merging with ME /e:/. The result in both speech forms today is /i:/.

In a considerable number of words early Modern English /eː/ was shortened and lowered to /ɛ/. This was the case in bread, dead, death, head, red, threat (all from OE *ēa*), breath, ready, sweat (all from OE *ǣ*), heavy (OE *e*), heaven (OE *eo*), etc. As is well known, /ɛ/ regularly appears in RP in these words, thus being levelled with ME /eː/. But this is not true of the dialect. Here the vowel was not shortened and, therefore, it developed in the same way as above, i.e. to /iː/, in the following words: bread, dead, head. In the others only /ɛ/ was recorded. However, in some words, variants with /ɛ/ are also heard today: /hiːd/ ~ /hɛd/, so that Standard English influence is noticeable here, too.

A small group of words shows yet another development: break (OE *e*), great (OE *ēa*), steak (ON *ei*). These have /ei/ in RP. In the eighteenth century the pronunciation varied between /iː/ and /eː/ in England. Then /eː/ gained priority in the standard language, was diphthongized and became /ei/ in RP. In the Gateshead dialect /iː/—the regular development—can still be heard in "great" and "break" today as in 1786 when Granville Sharp noticed this pronunciation "in the northern parts of England." However, owing to the influence of Standard English, /griːt/ and /briːk/ are now often replaced by /greːt/ and /breːk/.

The following diagram illustrates the different developments:



ME /iː/
Sources:
OE *ī* (ice, pipe, white, time), OE *ȳ* (lice, mice, pride, bride), OE *ēag* (eye), OE *ēo* (thigh); ON *ȳ* (sky, mire); OF *i* (arrive, bribe, cry).

ME /iː/ has normally developed into the diphthongal phoneme /ai/ both in RP and the dialect, i.e. the two forms of speech have taken the same course.

OE *i* before /nd/ was lengthened (like OE *u* before /nd/) and then merged with ME /iː/ which, in turn, became /ai/. Here the dialectal development was different from that in the standard language, since the dialect either retained the short vowel in this position or shortened it again before its diphthongization. Thus, contrary to RP, "blind" and "find" are today /blɪnd/ and /fɪnd/ in the dialect. But occasionally RP /ai/-forms also occur in traditional Gateshead speech in these words. (For the development of ME /i/ before *ht* [/ix/] into the dialect and RP see ME /i/.)

ME /ɔː/

SOURCES:

OE *o* (foal, stove, hole, coal, smoke); OF *o* (coat, note, roast, close).
ME /ɔː/, which coalesced with ME /ou/ in the dialect and in RP, was first raised to /oː/. This form we regularly find in Gateshead speech today. In the standard language /oː/ was diphthongized in the early nineteenth century and became /ou/ (see ME /ou/ and also ME /aː/).

ME /ou/

SOURCES:

OE *ōw* (grow, row *vb.*, flow), OE *og* (bow, flown).

As mentioned above, ME /ou/ was first monophthongized to /oː/. Up to this point we find the same development in the standard language and the dialect. In RP /oː/ was later diphthongized to /ou/. Thus an earlier form is preserved in the dialect today.

In the seventeenth century ME /ou/ merged with ME /ɔː/ in RP as well as in the dialect, the first phoneme being monophthongized and the second raised (see ME /ɔː/).

ME /oː/

SOURCES:

OE *ō* (cool, school, moon, tooth, spoon), OE *ēo* (choose, shoot); ON *ō* (boon, booth); OF *o* after labials (fool, boot).

ME /oː/ merged with ME /iu/ both in RP and the dialect—after /oː/ had been raised to /uː/ in the second part of the fifteenth century. ME /iu/ became /juː/ in early Modern English. After that the dialect and RP took a different course. Whereas in the latter /j/ was lost in all positions and /uː/ retained, /uː/ was shortened in the dialect and /j/ preserved in most positions.

The following words are usually pronounced with /uː/ in the dialect today: bloom, mood, cool, stool. This is to be attributed to Standard English influence. However, also in the other words mentioned above, the influence of the standard language becomes more and more noticeable, gradually replacing the genuine dialectal feature. Thus /muːn/ "moon" will soon be heard more often than /mjɷn/. As noted above, ME /oː/ was normally raised to /uː/ in late ME and merged with /juː/ (from ME /iu/).

Apart from the development just outlined, two other developments must be mentioned here that concern the standard language:

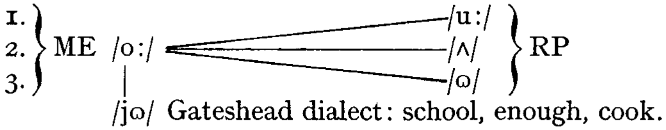
1. Early shortening of the vowel phoneme in certain positions in early Modern English before the unrounding of earlier /u/, and thus levelling with ME /u/. The result is /ʌ/ in RP (see ME /u/). /ʌ/ appears regularly

in the standard language in words belonging to this category: rough, suck, dove (from OE *ū*) and blood, done, flood, glove, month, other, mother, enough (from OE *ō*). As above, the regular dialectal development is /jɷ/. However, we recorded this sequence only in "enough." In all the other paradigms /j/ is no longer preserved today. Thus in traditional Gateshead speech the result in these cases is the same as that of ME /u/, namely /ɷ/.

2. Late shortening of the vowel phoneme after ME /u/ had already been unrounded to /ʌ/ in RP during the first half of the seventeenth century. This shortening, therefore, cannot have begun before the seventeenth century. In several words (book, cook, look, took—all from OE *ō*) RP /ɷ/ did not gain priority before the first half of the nineteenth century.

In the dialect, the regular development is still apparent in the pronunciations /bjɷk/ "book," /kjɷk/ "cook," and others. However, variants with /ɷ/ are becoming more and more frequent now. In bosom, foot, brook, shook, etc. we recorded only /ɷ/-forms. Whether this is due to Standard English influence or simply to analogy cannot be determined with certainty. (See in this connexion also ME /a:/.)

The three different developments outlined above can be illustrated schematically as follows:



ME /iu/

SOURCES:

OE *īw, ēow* (chew, knew, true); OF *ieu* (suit), OF *eu* (blue), OF *u* (duke, fume), OF *ui* (fruit, June), and OE *ēow, ēaw* (spew, few, dew), yielding ME /ɛu/, which merged with ME /iu/ in early Modern English.

ME /iu/ became /ju:/ in early Modern English. Both in RP and the dialect /j/ is still preserved today, except after affricates and /l, r/. Thus the same development has taken place in the dialect and the standard language.

In RP and the dialect ME /o:/ merged with ME /iu/ (see ME /o:/).

ME /ui/

SOURCES:

OF *ui, oi* (poison, join, joint).

This diphthong occurs in words of French origin only and has developed in the same way in RP and the Gateshead dialect, yielding /ɔi/ in both forms of speech.

ME /oi/
SOURCES:
OF *oi* (joy, noise).

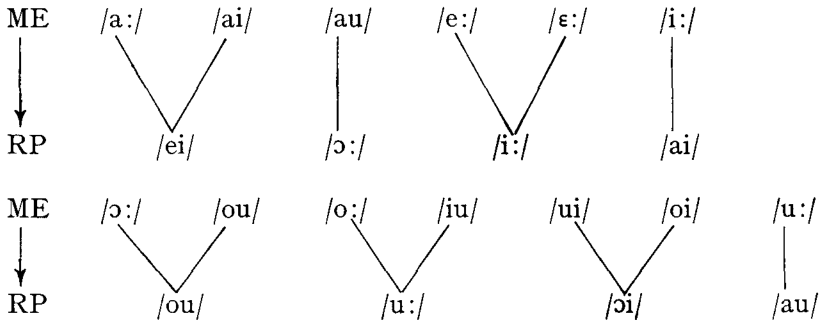
Like ME /ui/, /oi/ also occurs in words of French origin only. The two ME phonemes merged both in RP and the dialect and appear as /ɔi/ today. This is the only foreign vowel phoneme in the standard language and the dialect.

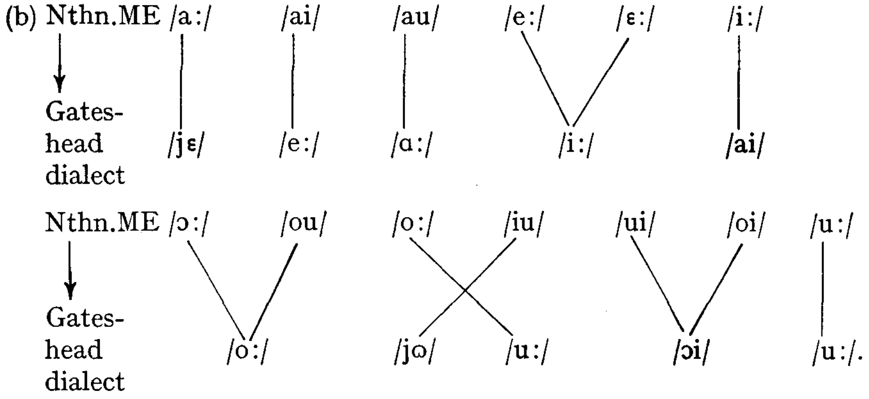
ME /u:/
SOURCES:
OE *ū* (down, how, cow, house, cloud, south, mouse, mouth, about); OF *ou, o* (count, doubt).

ME /u:/ remains as /u:/ in the dialect, except in final position, where /u:/ is dying out and is generally being replaced by /au/ through the influence of Standard English.[16] In the dialect /u:/ is not positionally restricted as is /au/, the normal development of ME /u:/ in RP. It is well known that the ME phoneme was not diphthongized in RP—and, of course, in the dialect—in words like room, stoop (from OE *ū*), i.e. before labials. OE *u* in ground, pound, etc. was lengthened in late OE—like OE *i* before /nd/—and merged with ME /u:/ in the standard language, finally yielding /au/. In the dialect, either this lengthening did not take place at all or the long vowel was shortened again before it could be diphthongized. In any case, the present-day regular realization in the dialect is /ɷ/. It must be noted, however, that /u:/ also occurs sometimes in words belonging to this category. In "wound," for example, we recorded only /u:/. This substitution is probably due to analogy with words like /du:n, hu:s/ "down, house," although in "wound" Standard English influence is likewise possible since ME /u:/ is also not diphthongized in RP after /w/.

The following two tables show the normal development of ME long vowel and diphthongal phonemes into RP and the dialect:

(a)





Some dialectal features seem to be more stable and less likely to succumb to Standard English influence in the near future. Others, however, will no doubt soon be completely replaced, especially since the area under investigation is urban and consequently the pressure of the standard language rather great, so that the traditional dialect is bound to become increasingly mixed. Further, the fluctuation of the population must be reckoned with as well as sociological factors, all of which contribute to a dilution of traditional dialect. Since the time will soon come when historically developed, genuine dialectal phonemes are no longer heard in several instances, the possibility of false reconstructions is increased. All this, we feel, increases the urgency of studying archaic, traditional dialect before these features disappear completely.[17]

The present study has made it possible to draw the following conclusions:

1. Older pronunciations have remained in one dialect while disappearing in others (including RP, which is a non-linguistic label characterizing the sound system of an English dialect as being socially acceptable).[18]
2. The growing influence of the class dialect Standard English is responsible for the gradual disappearance of older dialectal features.[19]
3. A dialect can develop the same way as—and even further than[20]—RP.
4. A dialect can take an altogether different course from RP.

NOTES

[*] It is both an honour and a particular pleasure for me to dedicate this paper to Professor Orton, who several years ago introduced me to the manifold problems of dialectology. Thirty-five years ago, Professor Orton published a monograph on his native village dialect Byers Green: *The Phonology of a South Durham Dialect: Descriptive, Historical and Comparative* (London, 1933). Thus, geographically speaking, we are only a few miles apart.

[1] G. L. Brook, *English Dialects* (London, 1963), p. 32. In addition, excellent accounts of dialect in general can be found in R. Quirk, *The Use of English*, 2nd impr. (London, 1963), pp. 81 ff. and H. C. Wyld, *A History of Modern Colloquial English*, 3rd ed. (Oxford, 1936), pp. 1-16.

[2] John and Joan Levitt, *The Spell of Words* (London, 1959), p. 20.

[3] This becomes apparent on comparing Joseph Wright's rather pessimistic outlook in *The English Dialect Grammar* (Oxford, 1905), p. iv, with the first lexical maps of *The Survey of English Dialects*, covering the whole of England. They still show a great variety of local expressions for the same Standard English word. Some of these maps (words for "weakest pig of the litter" and "newt") are reprinted in G. L. Brook, *op. cit.*

[4] For other factors conducive to the decline of regional dialect see S. Potter, *Our Language* (Harmondsworth, repr. 1961), p. 139.

[5] A purely descriptive analysis of this dialect—in accordance with modern linguistic methods—is Wolfgang Viereck, *Phonematische Analyse des Dialekts von Gateshead-upon-Tyne/Co. Durham* (Hamburg, 1966).

[6] For a detailed discussion of the methods of the English and the Scottish dialect surveys see Wolfgang Viereck, "Der *English Dialect Survey* und der *Linguistic Survey of Scotland*—Arbeitsmethoden und bisherige Ergebnisse," *Zeitschrift für Mundartforschung*, XXXI (1964), 333-55.

Apart from our own material, we have consulted both the *Survey of English Dialects* Vol. I and the evidence provided by Eduard Kolb, *Phonological Atlas of the Northern Region: The Six Northern Counties, North Lincolnshire and the Isle of Man* (Bern, 1966).

[7] Adherents to the American schools of descriptive linguistics have been carrying out their research to the exclusion of the history of the language, partly with unjustified appeal to Leonard Bloomfield, whose views were not entirely anti-historical. See his book *Language*, 7th impr. (London, 1962), pp. 281 and 508 ff. The Prague School, however, has from its very beginning considered the diachronic approach to language just as scientific as the synchronic approach and has successfully combined both aspects. For an early statement of the structural approach in the diachronic analysis see Roman Jakobson, "Prinzipien der historischen Phonologie," *Travaux du Cercle Linguistique de Prague*, IV (1931), 247-67; in French translation, "Principes de Phonologie Historique," as Appendix I to N. S. Trubetzkoy, *Principes de Phonologie* (Paris, 1949), pp. 315-36. Josef Vachek was especially engaged in historical-structural investigations of Standard English. See his papers, "On the Interplay of Quantitative and Qualitative Aspects in Phonemic Development," *Zeitschrift für Anglistik und Amerikanistik*, V (1957), 5-28; "Notes on the Quantitative Correlation of Vowels in the Phonematic Development of English," *Mélanges de Linguistique et de Philologie: Fernand Mossé in Memoriam* (Paris, 1959), pp. 444-56; "On the Interplay of External and Internal Factors in the Development of Language," *Lingua*, XI (1962), 433-48; "On Peripheral Phonemes of Modern English," *Brno Studies in English*, IV (1964), 7-109; "The Place of [ɔɪ] in the Phonic Pattern of Southern British English," *Linguistics*, XIV (1965), 52-9. Similar to the approach advocated by the Prague School is that of André Martinet. See the exciting ideas in his *Economie des changements phonétiques: Traité de phonologie diachronique* (Bern, 1955, repr. 1964). In the field of dialectology, the most thorough recent application of the synchronic and diachronic structural approach is that by Marthe Philipp, *Le Système Phonologique du Parler de Blaesheim (Bas-Rhin): Etude Synchronique et Diachronique* (Nancy, 1965). Also William G. Moulton has contributed a number of excellent studies in this field, mainly on Swiss German dialects.

[8] Class I—Professional, etc., Occupations; Class II—Intermediate Occupations; Class III—Skilled Occupations; Class IV—Partly Skilled Occupations; Class V—Unskilled Occupations. For a detailed description of the different social classes see *Census* 1951: *England and Wales—Occupation Tables* (London, 1956), pp. x-xii. The above figures are taken from *Census* 1951: *England and Wales—Housing Report* (London, 1956), pp. 86 ff. and from *Phonematische Analyse des Dialekts von Gateshead-upon-Tyne/Co. Durham*, pp. 56 ff. Figures for the total population are not available. They would, however, show a still higher percentage of the population belonging to Social Classes III-V. This is indicated by the fact that 92·4% of *all occupied* persons are "Operatives" and "Working on Own Account." See *Occupation Tables*, pp. 184 ff. All figures refer to the 1951 Census. Since the affiliation of the population with social classes was not asked for in the 1961 Census, no figures are available. See in this connection also John T. Wright, "Urban Dialects: A Consideration of Method," *Zeitschrift für Mundartforschung*, XXXIII (1966), 232-47.

[9] It is a regrettable fact that not enough research has been done in the field of Middle English dialectology. We need much more work of a *phonemic* orientation in this area, in which the spellings of all obtainable local texts and wills are carefully examined. A study of this kind

is Bertil Sundby's *Studies in the Middle English Dialect Material of Worcestershire Records*, Norwegian Studies in English 10 (1963). Regrettably this does not cover our region. The one that does is not phonemically orientated, viz. Gillis Kristensson, *A Survey of Middle English Dialects* 1290-1350: *The Six Northern Counties and Lincolnshire*, Lund Studies in English 35 (1967). We have therefore taken as a basis for the dialect development the phonemic system postulated for late Northern Middle English by Bertil Hedevind in *The Dialect of Dentdale in the West Riding of Yorkshire*, Studia Anglistica Upsaliensia 5 (1967), whose inventory comprises 5 short, 7 long and 6 diphthongal phonemes. His late NME /yː/ is here treated as early NME /oː/.

[10] As regards the history of Standard English, the following works have been consulted: K. Brunner, *Die englische Sprache: Ihre geschichtliche Entwicklung*, 2nd ed. (2 vols., Tübingen, 1960-62); O. Jespersen, *A Modern English Grammar on Historical Principles*, Pt. I (Heidelberg, 1909); K. Luick, *Historische Grammatik der englischen Sprache* (Leipzig, 1914-40, repr. with index, Oxford and Stuttgart, 1964); W. Horn—M. Lehnert, *Laut und Leben: Englische Lautgeschichte der neueren Zeit* (*1400-1950*) (2 vols., Berlin, 1954); E. J. Dobson, *English Pronunciation 1500-1700* (2 vols., Oxford, 1957); A. C. Gimson, *An Introduction to the Pronunciation of English* (London, 1962, repr. 1964); Börje Holmberg, *On the Concept of Standard English and the History of Modern English Pronunciation*, Lunds Universitets Årsskrift, Bd. 56, Nr. 3 (1964) and Hans Kurath, *A Phonology and Prosody of Modern English* (Heidelberg and Ann Arbor, 1964). This last important book compares the pronunciation of RP with the main types of cultivated American English and traces their history. Furthermore, it is phonemically orientated. As far as the diachronic part of it is concerned, we acknowledge our indebtedness to it, and in particular our use of it as a basis for the description of the Standard English development. Since the evidence furnished by orthoëpists and phoneticians often cannot be interpreted unequivocally, scholars consequently disagree on the time when certain phonetic changes took place. It is for this reason that in a number of cases we have dispensed with datings. What is important for our purpose is not to state the "exact" time of a certain change, but rather to establish the exact succession of a number of changes.

[11] The discussion on the phonemic value of Old English vowel graphs was opened by Marjorie Daunt in her paper "Old English Sound-Changes Reconsidered in Relation to Scribal Tradition and Practice," *Transactions of the Philological Society* (1939), 108-37, and was taken up again by M. L. Samuels in "The Study of Old English Phonology," *Transactions of the Philological Society* (1953), 15-47; see also Marjorie Daunt's rejoinder "Some Notes on Old English Phonology," *ibid.*, 48-54. On some of these problems see Sherman M. Kuhn, "On the Syllabic Phonemes of Old English," *Language*, XXXVII (1961), 522-38 (with an extensive bibliography of the research done on the phonemic system of Old English).

[12] Symbols and conventions used are those of the International Phonetic Alphabet.

[13] The phonemic value of length in RP is controversial. Some linguists accept its phonemic status, although they may disagree on the phonemic representation, while others deny that quantity is phonemic in Modern English. In this analysis, contrary to the situation in ME, length is phonemic neither in RP nor in the dialect, since it is always connected with a difference in quality. Length marks may therefore be regarded as redundant. To mention an alternative solution, it would have been possible to adopt a so-called overall frame, as advocated by a number of American linguists and as objected to by others, in dealing with historical data, e.g. to analyse all long vowels as diphthongs, i.e. as biphonemic, even when they occur in ME or early Modern English.

[14] The line of this and other ME boundaries referred to in the article is established exactly by Gillis Kristensson, *op. cit.*

[15] On the origin and significance of the uvular *r* in English (the so-called "burr"), found in places in and around Gateshead, as compared with the situation in French and German, see Wolfgang Viereck, "Zur Entstehung und Wertung des uvularen *r* unter besonderer Berücksichtigung der Situation in England," *Phonetica*, XIII (1965), 189-200. A fuller account of this problem has appeared in *Jahrbuch des Marburger Universitätsbundes* (1965), 125-34. On the uvular *r* in Northern English folk speech see also Oliver Heslop, "Dialect Notes from Northernmost England," *Transactions of the Yorkshire Dialect Society*, Pt. V, Vol. 1 (1903), 7-31 (with a map on "Limit of the Burr"); Harold Orton, "The Dialects of Northumberland," *Transactions of the Yorkshire Dialect Society*, Pt. XXXI, Vol. 5 (1930), 14-25; and Eduard Kolb, "Skandinavisches in den nordenglischen Dialekten," *Anglia*, LXXXIII (1965), 127-53, especially map 12.

[16] As regards allophonic variants of this and all other phonemes we refer to *Phonematische Analyse des Dialekts von Gateshead-upon-Tyne*, where these have been listed in detail.

[17] Language is constantly changing. This is true of the conservative dialect (above all through internal change or through the influence of Standard English) and of RP. On some notable trends in the standard language see Charles Barber, *Linguistic Change in Present-Day English* (Edinburgh and London, 1964).

[18] In the United States of America there is not one canonized form of pronunciation as in England; instead, educated speech has regional varieties of equally accepted status, which, of course, are left out of consideration here. For details see Kurath's book mentioned in footnote 10.

[19] In an article entitled "The Isolative Treatment in Living North-Midland Dialects of OE *e*

lengthened in Open Syllables in Middle English," *Leeds Studies in English and Kindred Languages,* VII-VIII (1952), 97-128, Harold Orton draws our attention to an important point. Before traditional sounds are lost the distribution of dialect sounds may become confused in certain cases under the influence of RP. If two vowels, for example, are kept distinct in the dialect but not in RP, the dialect speaker may use these two vowel sounds indiscriminately. Some "erratic usages" may well be accounted for in this way.

[20] See Josef Vachek, "Some Thoughts on the Phonology of Cockney English," *Philologica Pragensia,* V (1962), 159-66, which is a review of Eva Sivertsen, *Cockney Phonology,* Oslo Studies in English 8 (1960). An important and interesting observation in this respect was made by W. Horn—M. Lehnert, *Laut und Leben,* I, 69 ff. They make the point that as one approaches the southeast and London one reaches up-to-date Standard English and, since a standard language is conservative too, one begins to find forms in advance of it in popular speech. See also W. Horn, "Die gesellschaftliche Hemmung der natürlichen Lautentwicklung in der englischen Hochsprache," *Die Neueren Sprachen,* L (1942), 10-17.

THE DIALECT OF FILEY (YORKSHIRE, EAST RIDING): THE VOWELS OF STRESSED SYLLABLES

By J. D. A. WIDDOWSON

There is evidence of considerable variation at the phonetic level in the dialect of Filey. This phenomenon, though undoubtedly recognized, has not been demonstrated in detail, to my knowledge, for any specific locality, and research into the living speech of Filey suggests that it may be a fruitful ground for further study. The fact that Filey may be designated a dialectal relic area makes it especially prone to those pressures which may bring about a considerable modification or even a breakdown of its traditional phonemic system. Such pressures, based chiefly on a variety of Northern regional pronunciation, have had and are having a considerable influence on the local speech.

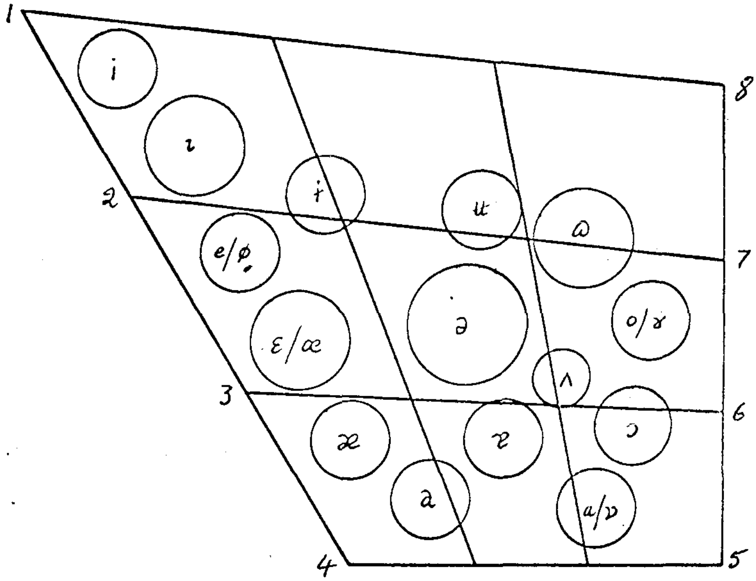
In order to elicit the range of phonetic variants, informal tape-recordings were made of some 25 principal native informants in Filey between 1960 and 1964. These recordings were supplemented by impressionistic transcriptions of a much smaller number of individual words and phrases from casual utterance. Since the process of change is still continuing, it was felt that the use of the more formal questionnaire technique would tend to make speakers more self-conscious and deliberate in their speech and thus precondition their responses to a greater extent than during informal conversation. Attention was therefore concentrated on the recording of free conversation under the most informal conditions possible. Individual words were then selected for analysis from the transcription of the speech continuum. As the average age of the informants was 65 the conclusions naturally reflect the traditional and conservative local usage, but the wide range of phonetic variation indicates the presence of the encroaching Northern Regional Standard and of other sounds intermediate between the two systems. The principal phonetic variants in the vowel sounds of syllables under strongest stress are presented in the following tabulated analysis.

1. The Filey dialect has the following vowel sounds in stressed positions:

Short vowels [i, ι, ɨ, e, ø, ε, œ, æ, a, ɐ, ɑ, ɒ, ɔ, ʌ, o, ɤ, ω, ʉ, ə].
Long vowels [iː, ιː, eː, εː, æː, aː, ɑː, ɒː, ɔː, oː, ωː, uː, ʉː, əː, ëː].
Diphthongs [iɨ, iə, ιi, ιɨ, ιω, ιu, ιə, ɨi, ɨι, ɨω, ɨu, eι, eɨ, eə, ει, εɨ, εə, æι, æə, aι, aɨ, aω, aə, ɐι, ɐω, ɑι, ɑɨ, ɑω, ɑu, ɑʉ, ɑə, ɒι, ɒɨ, ɒω, ɒu, ɒʉ, ɒə, ɔι, ɔɨ, ɔω, ɔu, ɔʉ, ɔə, ʌω, oι, oɨ, oω, ou, oʉ, oə, ɤω, ɤu, ωι, ωɨ, ωu, ωʉ, ωə, uʉ, uə, ʉω, ʉu, əι].

Short Vowels

2. [i] is the close front tense unround vowel. Especially under strongest stress or when final in a syllable it is often pronounced with considerable tension. The tongue may be raised so close to the front palate and the teeth-ridge that at its most extreme this sound approaches the articulation position of cardinal 1. It occurs only rarely and is normally the strongly-stressed equivalent of dialectal [ι]. It occurs in the following words: [gin] given; [il] hill; [ˈkitiwειk] kittiwake; [ˈlisn] listen; [sit] sit; [siks] six.



THE SHORT VOWELS OF STRESSED SYLLABLES.

3. [ɩ] is the close front lax unround vowel, somewhat lower, more centralized and less tense than dialectal [i], but somewhat tenser than the vowel in RS "bit" "wit" etc. It is found in [ˈbɹɩslɩnz] beestings; [dɹɩs] dress; [ˈflɩðə] flither; [ˈkɩtlɩn] kitten; [stɹɩtʃ] stretch; [ˈθɩml] thimble.
4. [ɨ] is the close front-central lax unround vowel, lower, less tense and considerably more centralized than dialectal [ɩ]. It normally occurs in unstressed syllables but is included here because it is sometimes found in stressed positions in such words as [ˈdɨgɨn] digging; [fɨl] fill; [ˈnɨvə] never; [pɨn] pin; [ˈpɹɨmɹɒʉz] primrose; [ˈʃɨlɨn] shilling.
5. [e] is the half-close front lax unround vowel, lower and considerably tenser than the vowel in RS "bit" "wit" etc., but slightly lower, less tense and considerably more centralized than cardinal 2. It occurs in [dek] deck; [ˈɹet ʔn] reckon; [ɹest] rest; [ʃɹemp] shrimp; [veks] vex; [ˈwentə] winter.
6. [ø] is the half-close front lax round vowel, lower than the vowel in RS "bit" "wit" etc., but lower, less tense and more centralized than cardinal 2. It is the rounded equivalent of dialectal [e] and is extremely rare. Examples are [ølp] help; [twølv] twelve.
7. [ɛ] is the half-open front lax unround vowel, slightly raised from and more centralized than cardinal 3. It is found in [blɛg] bleg, sea bream; [ˈklɛmɩ] clemmy, small stone; [ˈsɛgɩ] seggy, sycamore; [stɛg] steg, gander; [ɷpˈskɛld] upskelled, overturned; [ɹɛk] wreck.
8. [œ] is the half-open front lax round vowel, slightly raised from and more centralized than cardinal 3. It occurs very seldom and is the rounded equivalent of dialectal [ɛ] as in [ˈvœlvɩt ʔ] velvet.
9. [æ] is the raised open front lax unround vowel, pronounced approximately midway between dialectal [ɛ] and [a], the tongue being lowered and retracted through approximately equal stages. In the Filey dialect this sound has a similar position of articulation (between half-open and open) to that of English vowel 4 as described by Jones,[1] but also seems to be rather more raised and centralized. A slight degree of tension often appears to occur in the articulation of this sound and this feature distinguishes it from the characteristic slack articulation of dialectal [ɛ] and [a]. It is found in [æsk] ask; [ˈkæ ʔl] cattle; [dæʃ] dash; [jæns] once; [ˈpæɹit ʔ] parrot; [ˈvæntʃəd] ventured.
10. [a] is the open front lax unround vowel, somewhat raised from and considerably more centralized than cardinal 4. It occurs in the following words: [jal] ale; [kaf] chaff; [dag] dag, rag to protect the hand; [ˈgaləsɩz] gallows, braces; [ˈɹadɩdu] raddy-doo; [stɹaŋ] strong.

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[1] D. Jones, *Outline of English Phonetics*, (9th ed., Heffer, Cambridge, 1960), p. 72. Hereafter cited in text as Jones, followed by the page number.

11. [ɐ] is the open central lax unround vowel. It is pronounced approximately midway between cardinals 4 and 5, but the centre of the tongue is raised to a position between half-open and open, though with no apparent tension. Dialectal [ɐ] naturally occurs in unstressed syllables but is also found in stressed positions as indicated by the following examples: [lɐd] lad; [ˈmɐnɪ] many; [pɐl] pal; [ɹɪˈmɐmbə] remember; [stɐnd] stand; [ˈvɐɹɪ] very.

12. [ɑ] is the open back lax unround vowel, somewhat raised and considerably advanced from cardinal 5. It occurs in [bɹɑs] brass, money; [ˈflɑgstiən] flagstone; [lɑmp] lamp; [ˈmɑkɹil] mackerel; [ɔvəˈkɑp] overcap; [ˈwɑgənəɹ] wagoner.

13. [ɒ] is the open back lax round vowel, considerably raised and somewhat advanced from the cardinal 5 position. Its rounded quality is normally due to the influence of neighbouring labial consonants as is apparent from these examples: [ʉˈfɒd] afford; [əˈmɒŋ] among; [ˈbɒskɪt] basket; [fɒkt] fact; [ˈɒnɪstlɪ] honestly; [lɒf] laugh.

14. [ɔ] is the half-open back lax round vowel, lowered from and considerably more centralized than cardinal 6. It is much closer than the vowel in RS "fog" "cot" etc., and occurs in [bɹɔk] brock, cuckoo-spit; [klɔd] clod, penny; [fɔnd] fond, foolish; [fɔˈwɔdn̩] forwoden, infested; [lɔp] lop, flea; [pɔs] purse.

15. [ʌ] is the half-open back-central lax unround vowel. This sound has a similar articulation position to that of English vowel 10 as described by Jones, 86, but somewhat raised and centralized. As an apparent borrowing from RS, it is used occasionally in stressed syllables by the more educated and less conservative speakers, replacing the more normal dialectal [ɷ] in such words as [bɹʌst] burst; [ˈkʌntɹɪ] country; [kɹʌd] curd; [ˈʌnɪən] onion; [ˈsʌmbɔdɪ] somebody; [ˈʌŋkl̩] uncle. However, it is also the unrounded equivalent of dialectal [ɔ], considerably raised and centralized, as in [ˈfʌɹən] foreign; [ʃʌp] shop; [tʌp] top.

16. [o] is the half-close back lax round vowel, lowered from and considerably more centralized than cardinal 7. It occurs in [ˈboðəɹ] bother; [ˈfotɪn] footing; [ˈondəd] hundred; [nok] knock; [lok?] look; [ˈwondə] wonder.

17. [ɤ] is the half-close back lax unround vowel, lowered from and considerably more centralized than cardinal 7. It is the unrounded equivalent of dialectal [o]. Examples are [kɤp] cup;]fɹɤnt] front; [fɤl] full; [pɤl] pull; [pɤp] pup; [stɤd] stood.

18. [ɷ] is the close back lax round vowel, somewhat closer than cardinal 7, but very much lower, more centralized and less rounded than cardinal 8. Dialectal [ɷ] appears in [ˈbɷlstən] bull-stone, sharpening-

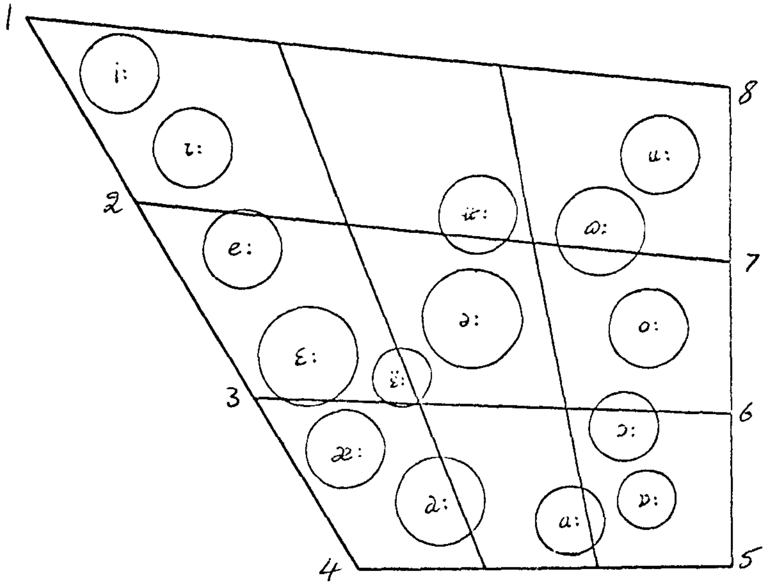
stone; [ˈklɷmpəz] clumpers, clogs; [ˈkɷdɩ] cuddy, hedgesparrow; [ˈkɷvɩnz] cuvvins, periwinkles; [ˈfɷzək] fuzzock, fool; [mɷs] muss, concoction.

19. [ʉ] is the close back-central lax unround vowel, very slightly raised from and considerably more centralized than dialectal [ɷ]. It is normally found in unstressed syllables but sometimes occurs in stressed positions in such words as [lʉmp] lump; [nʉt] nut; [pʉt] put; [ˈsʉmtaːmz] sometimes; [sʉtʃ] such.

20. [ə] is the half-open central lax unround vowel. This is the typical vowel sound of unstressed syllables but is also found very occasionally in stressed positions, as in [ənd] end; [ˈhəzbənd] husband; [ləs] less; [ˈməbɩ] maybe; [ɹən] ran; [ˈwədðəɹ] whether.

Long Vowels

21. [iː] is the close front tense unround vowel. Under strongest stress or when final it is often pronounced with very marked tension, and the tongue may be raised so close to the front palate and the teeth-ridge that at its most extreme this sound approaches the articulation position



THE LONG VOWELS OF STRESSED SYLLABLES.

of cardinal 1. When dialectal [i:] occurs finally in a word, this raising may even produce such a degree of constriction that very slight friction can occur. In a very narrow phonetic transcription the extremely close final position is indicated by the symbols [iʲ], [i·ʲ] and [i:ʲ]. The following words contain dialectal [i:]: [di:ʲ] die; [ˈgɹi:dɩ] greedy; [ˈdʒi:zəs] Jesus, sixpence; [skwi:z] squeeze; [sti:] sty, ladder; [ˈwi:ləɹ] wheeler, wheelwright.

22. [ɩ:] is the close front lax unround vowel, somewhat lower, more centralized and less tense than dialectal [i:]. It occurs in [bɹɩ:d] breed; [ˈkɩ:lbo:t] keel-boat; [ˈnɩ:dl̩] needle; [spɩ:d] speed; [stɩ:p] steep; [tɩ:tʃ] teach.

23. [e:] is the half-close front lax unround vowel, slightly lower, less tense and more centralized than cardinal 2. It is found in [bɹe:k] break; [kle:] clay; [e:tʃ] each; [le:k] lake, play; [ˈpe:ʃωtəɹ] peashooter; [pɹe:tʃ] preach.

24. [ɛ:] is the half-open front lax unround vowel, very slightly raised from and more centralized than cardinal 3. It is found in the following words: [ˈglɛ:zɩ] glazy, oilskin coat; [ˈmɛ:stəɹ] master; [ɔkiˈpɛ:ʃən] occupation; [pɛ:] pay; [ˈɹɛ:dɩɔ:] radio; [sɛ:m] saim, lard.

25. [æ:] is the raised open front lax unround vowel, pronounced approximately midway between dialectal [ɛ:] and [a:], but somewhat raised from and more centralized than English vowel 4 as described by Jones, 72. Words containing dialectal [æ:] are [ˈgæ:dn̩] garden; [ˈæ:nɩs] harness; [ˈpæ:t̮ʔnəɹ] partner; [ˈʃæ:pəɹ] sharper, more quickly; [stæ:t̮ʔ] start; [jæ:n] yarn.

26. [a:] is the open front lax unround vowel, somewhat raised from and considerably more centralized than cardinal 4. It occurs in [ˈga:θaŋl̩] garthangle, gaff; [sa:k] sark; [ˈska:ɹə] scarer, sea-anemone; [ˈsta:ndɩl] starndill, starling; [ˈwa:fɩʃ] warfish, razor-fish; [wa:k] work.

27. [ɑ:] is the open back lax unround vowel, slightly raised and somewhat advanced from the cardinal 5 position. Examples include [ˈbɑ:ndəɹ] binder; [ˈbɹɑ:dzmɛ:d] bridesmaid; [ˈklɑ:təd] clarted, smeared with dirt; [fɑ:v] five; [tɑ:d] tide; [ˈvɑ:lɩt] violet.

28. [ɒ:] is the open back lax round vowel, considerably raised and somewhat advanced from the cardinal 5 position. It is found in [ˈɒ:fl̩] awful; [blɒ:] blow; [dɹɒ:n] drawn; [ˈnɒ:tɩs] notice; [ˈtɹɒ:lə] trawler; [wɒ:k] walk.

29. [ɔ:] is the half-open back lax round vowel, very slightly lowered from and somewhat more centralized than cardinal 6. Dialectal [ɔ:] appears in [fɔ:f] faugh, fallow; [ˈmɔ:pɩ] mopy, foolish; [skɔ:p] scalp; [skɹɔ:t] scrawt, scratch; [vɔ:g] vogue; [jɔ:l] yawl.

30. [o:] is the half-close back lax round vowel, somewhat lower and more centralized than cardinal 7. It occurs in the following: [əˈgo:] ago; [ko:t] coat; [ˈpo:kɩn] poking; [ɹo:d] road; [sko:t̯ʔ] scout, guillemot; [so:k] soak.

31. [ɷ:] is the lowered close back lax round vowel, somewhat closer than cardinal 7, but very much lower, more centralized and less rounded than cardinal 8. Dialectal [ɷ:] is seen in these words: [ˈbɷ:kɩ] bookie; [fɷ:d] food; [ˈgɹɷ:mɩn] grooming; [mɷ:θ] mouth; [ɹɷ:nd] round; [ʃɷ:] shoe.

32. [u:] is the close back lax round vowel, somewhat lowered and centralized from the cardinal 8 position. Slightly under-rounded, this sound nevertheless has much more pronounced lip-rounding than dialectal [ɷ:]. The following words contain dialectal [u:]: [ku:l] cowl, swelling; [lɔbˈsku:s] lobscouse; [ˈlu:zɩ] lousy; [mu:s] mouse; [ˈɹu:ʃn̩z] rooshens, people; [spu:t] spout.

33. [ʉ:] is the close back-central lax unround vowel, somewhat raised from and considerably more centralized than dialectal [ɷ:]. Its rare occurrence is illustrated in the following examples: [ɹʉ:nd] round; [sʉ:n] soon.

34. [ə:] is the half-open central lax unround vowel found in [ˈə:lɩ] early; [ə:d] heard; [ˈmə:tʃənt] merchant; [ˈmə:mɛɩd] mermaid; [ɹɩˈsə:tʃ] research; [wə:d] word.

35. [ɛ̈:] is the half-open front-central lax unround vowel, somewhat raised from and considerably more centralized than cardinal 3 but somewhat lowered from and more centralized than dialectal [ɛ:]. It occurs in [bɛ̈:θ] birth; [ˈsɛ̈:kləɹ] circular; [kɔnˈsɛ̈:n] concern; [kɛ̈:b] kerb; [pɛ̈:l] pearl; [tɛ̈:n] turn.

Diphthongs

36. [iɨ] The first element has the same position of articulation as that of dialectal [i] and is typically half-long. It is pronounced with considerable tension and bears the greater stress. The second element is similar to dialectal [ɨ], but somewhat lower and more centralized. This diphthong is found in the following words: [kiɨk] cake; [iɨl] heel; [ɹiɨl] real; [ɹiɨk] reek; [ˈsiɨzn] season; [siɨn] soon.

37. [iə] The first element is a sound lowered and somewhat centralized from cardinal 1. Normally it is half-long, bears the greater stress and is pronounced with considerable tension. The second element is the typical half-open central vowel of unstressed syllables. The diphthong occurs in [biəf] bough; [kiəv] cave, clean fishing-lines; [fliəɹ] floor; [ˈgiəsgɔb] goosegob, gooseberry; [miəɹ] mare; [sniəd] snood.

38. [ɪi] The first element is the close front lax unround vowel, slightly lowered and centralized from the position of dialectal [ɪ]. The second element consists of a sound somewhat lowered and centralized from cardinal 1. Examples of this diphthong include [əˈgɹɪi] agree; [ɪit] eat; [nɪit] night; [sɪi] sea; [tɪi] tea; [wɪik] weak.

39. [ɪɨ] The first element has a position of articulation approximately midway between dialectal [i] and [ɪ]. It is pronounced with considerable tension though it is normally less tense than dialectal [i]. The greater stress falls on this element which is typically half-long. It is followed by a slightly lowered and more centralized version of dialectal [ɨ]. The following words contain this diphthong: [tʃɪɨp] cheap; [klɪɨz] clothes; [fɪɨld] field; [ˈpɹɪɨtʃəɹ] preacher; [ˈskɪɨnɪn] skaning.

40. [ɪω] The first element is similar to dialectal [ɪ], somewhat raised and fronted, though still markedly lower and more centralized than dialectal [i]. The second element is the longer and bears the greater stress. It is the lowered close back slack round vowel. The diphthong is found in [dɪω] due; [fɪω] few; [fɪωmz] fumes; [nɪωz] news; [plɪω] plough; [ˈtɪωzdɪ] Tuesday.

41. [ɪu] The first element is the same as that of dialectal [ɪω] above (§40). The second element is a close back lax round vowel, somewhat lowered and centralized from the cardinal 8 position. Examples of this diphthong are [dɪuk] duke; [fɪud] feud; [nɪut] newt; [pɪu] pew; [pɹəˈdɪus] produce, supply; [sɪut] suit.

42. [ɪə] The first element is a sound approximately midway between dialectal [i] and [ɪ]. It is normally half-long and bears the greater stress. Though pronounced with considerable tension it is less tense than dialectal [i]. The second element is the typical half-open central vowel of unstressed syllables. The diphthong appears in [fɪəs] face; [fɪəl] fool; [lɪəm] lame; [stɪən] stone; [tɪəf] tough; [iəl] whole.

43. [ɨi] A sound somewhat lower and more centralized than dialectal [i] forms the first element of this diphthong. Its position is approximately that of dialectal [i], slightly lower, more centralized and less tense than cardinal 1. Examples of its occurrence are [əˈslɨip] asleep; [bɨitʃ] beach; [bɨi] bee; [klɨin] clean; [ˈɨisɪːt] eyesight; [tɹɨi] tree.

44. [ɨɪ] The first element is a sound lower and more centralized than dialectal [ɨ]. It is followed by the close front lax unround vowel, somewhat raised and fronted from the position of dialectal [ɪ]. This element is longer and carries greater stress. The diphthong is found in [ˈlɨɪtɪd] lighted; [ˈpɨɪkɔk] peacock; [ˈpɨɪpl] people; [ˈsɨɪkɹət?] secret; [ʃɨɪp] sheep; [spɨɪtʃ] speech.

45. [ɨω] This diphthong differs from dialectal [ɪω] above only in the articulation position of its first element which in this case is slightly

lowered from and more centralized than dialectal [ɨ]. The rare instances of [ɨɷ] are seen in [fɨɷ] few; [nɨɷ] knew; [mɨɷl] mule.

46. [ɨu] A sound slightly lowered from and more centralized than dialectal [ɨ] forms the first element of this diphthong which is in all other respects identical with dialectal [ɩu] above (§41). It occurs in [ˈkɨuə] cure; [ˈdɨutiː] duty; [fɨu] few; [ˈnɨulɩ] newly; [stɨu] stew; [tɹɨuθ] truth.

47. [eɩ] The first element is a sound slightly lower, less tense and more centralized than cardinal 2. It has a position of articulation slightly raised and fronted from that of dialectal [ɩ] and is rather more tense. Some examples of this diphthong are: [əˈsteɩd] astead; [tʃeɩst] chased; [peɩst] paste; [pleɩs] place; [teɩk] take; [tɹeɩd] trade.

48. [eɨ] The initial sound is slightly lower, less tense and more centralized than cardinal 2. Typically it is half-long and carries the stronger stress. The second element is similar to dialectal [ɨ], but is lowered and more centralized. The following words include this diphthong: [kleɨnd] cleaned; [leɨv] leave; [leɨf] loaf; [ɹeɨd] red; [ˈstɹeɨndzlɩ] strangely; [teɨtʃ] teach.

49. [eə] The first element is the half-close front lax unround vowel, slightly lower, more centralized and less tense than cardinal 2. Normally half-long, it also bears the greater stress. The second element is the typical half-open central vowel of unstressed syllables. The following words contain dialectal [eə]: [deəf] deaf; [eək] hook; [ˈpeəstɹɩ] pastry; [seən] soon; [steəl] stool; [teəl] tale.

50. [ɛɩ] The first element is a sound slightly raised from and more centralized than cardinal 3. It is normally half-long and carries the greater stress. The second element has an articulation position similar to that of dialectal [ɩ], very slightly raised. This diphthong is found in [bɹɛɩ] bray, beat; [kɹɛɩzd] crazed, vexed; [kɛɩ] key; [ˈmɛɩpɔəl] maypole; [pɹɛɩs] price; [sɛɩl] sail.

51. [ɛɨ] This diphthong has the same initial sound as that of dialectal [ɛɩ] above (§50). It is followed by a somewhat lower and more centralized version of dialectal [ɨ] and appears in the following words: [ˈɛɨlɩn] ailing; [bɛɨt] bait; [ˈgɛɨtʔpɔst] gatepost; [lɛɨk] lake, play; [ˈtɛɨtɩ] potato; [vɛɨn] vein.

52. [ɛə] The first element is a sound very slightly raised from and somewhat more centralized than cardinal 3. Normally half-long, it also bears the greater stress. The second element is the typical half-open central vowel of unstressed syllables. Some examples of this diphthong are as follows: [ˈbɛət‿ʔbən] baitband; [ˈgɛənsɩ] guernsey, pullover; [ˈmɛənbɹɛəs] mainbrace; [pɛət] part; [ˈɹɛəzn̩] raisin; [skɛəv] skave, ploughwheel.

53. [æɩ] The raised open front lax unround vowel pronounced approximately midway between dialectal [ɛ] and [a] forms the first element of this diphthong. Typically it is half-long and bears the greater stress. It is followed by a sound somewhat raised from and more tense than dialectal [ɩ]. The diphthong occurs in [tæɩs] entice; [kæɩ] quay; [ˈkwæɩət] quiet; [skɹæɩk] skrike; [tɹæɩp] tripe; [wæɩ] weigh.

54. [æə] The initial sound has the same position and characteristics as those of dialectal [æɩ] above (§53). The second element is the typical half-open central vowel of unstressed syllables. The diphthong occurs only rarely and is found in these words: [bæə] buy; [kæət] cart; [ɹɩˈtæəd] retired; [wæəl] while.

55. [aɩ] The first element consists of a sound similar to dialectal [a], raised and centralized from the cardinal 4 position. It is normally half-long and carries the greater stress. The second element is identical with that of dialectal [æɩ] above (§53). Examples include [faɩ] fay, winnow; [flaɩp] flipe, brim of hat; [gɹaɩp] gripe, manure-fork; [paɩk] pike, point-end of anvil; [slaɩp] slipe, plough-blade; [taɩd] tide, measure of fish.

56. [aɨ] The first element is a sound identical with that of dialectal [aɩ] above (§55). It is followed by the close front-central lax unround vowel, very slightly lowered from and more centralized than dialectal [ɨ]. The following words contain this diphthong: [ˈbaɨldə] bilder, more sheltered; [ˈdaɨmənd] diamond; [pɹaɨz] prize; [ɹɩˈplaɨd] replied; [tɹaɨ] try; [ˈwaɨələs] wireless.

57. [aɷ] The initial sound is somewhat raised and considerably centralized from cardinal 4. It is the longer element and bears the greater stress. Following it is the close back round vowel, somewhat raised and retracted from the position of dialectal [ɷ]. The diphthong is found in [tʃaɷ] chaw, grumble; [ˈkaɷləɹ] couler, scraper; [dʒaɷl] jowl, sea-swell; [laɷ] low, small plaice; [ˈpaɷtʃəɹ] poacher; [staɷp] stoop, doorpost.

58. [aə] The first element has the same position and characteristics as those of dialectal [aɩ] above (§55). This is followed by the typical half-open central vowel of unstressed syllables. The diphthong appears in [daək] dark; [ˈfɹaədə] Friday; [ˈlaətl] little; [maək] mark; [ˈɹaəvɩn] riving; [saəl] sile, young herring.

59. [ɐɩ] The first element is the open central lax unround vowel, pronounced approximately midway between cardinals 4 and 5. It is the longer and bears the greater stress. The second element is a sound slightly raised from the position of dialectal [ɩ]. The following words illustrate the occurrence of this diphthong: [ˈɐɩsɩn] icing; [lɐɩf] life; [nɐɩs] nice; [twɐɩs] twice; [wɐɩt] white; [wɐɩf] wife, woman.

60. [ɐɷ] This diphthong begins with an open central lax unround vowel pronounced approximately midway between cardinals 4 and 5. It is the longer element and bears the greater stress. A close back round vowel very similar in quality to dialectal [ɷ] follows it. The diphthong is heard in [kɐɷ] cow; [gɹɐɷnd] ground; [ɐɷt͜ʔ] ought; [ˈɹɐɷlɩn] rolling; [ɹɐɷ] row, commotion, quarrel; [ˈtɐɷɩn] towing.

61. [ɑɩ] The open back lax unround vowel, raised and considerably advanced from cardinal 5, forms the first element of this diphthong. It is normally half-long and carries the greater stress. It is followed by the close front lax unround vowel, slightly raised from the position of dialectal [ɩ]. Examples include [dɑɩd] died; [fɑɩn] fine; [pɑɩp] pipe; [ɹɑɩd] ride; [ˈsɑɩnpɔst] signpost; [wɑɩz] wise.

62. [ɑɨ] This diphthong has the same initial sound as that of dialectal [ɑɩ] above (§61). The second element is the close front-central unround vowel, very slightly lowered from the position of dialectal [ɨ]. It is found in the following: [əˈlɑɨv] alive; [dɹɑɨv] drive; [pɑɨ] pie; [pɹɑɨd] pride; [sɑɨld] siled, infested; [sɑɨz] size.

63. [ɑɷ] This diphthong has an initial sound somewhat raised and centralized from cardinal 5. This element is the longer and bears the greater stress. It is followed by a close back round vowel very similar in quality to dialectal [ɷ]. Examples include: [ˈlɑɷdəɹ] louder; [mɑɷl] mole; [ˈɑɷnəɹ] owner; [pɑɷnd] pound; [sɑɷld] sold; [sɑɷl] soul.

64. [ɑu] The first element has the same quality and characteristics as those of dialectal [ɑɷ] above (§63). The second element is a sound somewhat lowered and centralized from the position of cardinal 8. Words containing this diphthong are: [bɑul] bowl; [bɑu] bow-shaped strut of crabpot; [bɹɑut] brought; [bɹɑun] brown; [kɑuld] cold; [ˈdɑulɩ] dowly, gloomy.

65. [ɑʉ] The first element has the same quality and characteristics as those of dialectal [ɑɷ] above (§63). It is followed by a close back-central unround vowel, very slightly raised from and considerably more centralized than dialectal [ɷ]. Its rare appearance is illustrated in such words as [ˈfɑʉndɩd] founded; [ɹɑʉld] rolled; [tɑʉk͜ʔ] talk.

66. [ɑə] The initial element is a sound somewhat raised and advanced from the cardinal 5 position. It is followed by the typical half-open central vowel of unstressed syllables and occurs in [ˈdɹɑəvə] driver; [fɑəv] five; [ɩnˈsɑəd] inside; [lɑən] line; [ˈnɑəntɩ] ninety; [pɑənt] pint.

67. [ɒɩ] This diphthong begins with the open back lax round vowel, considerably raised from and more centralized than cardinal 5. Normally half-long, it also carries the greater stress. The second element is the close front lax unround vowel, slightly raised from the position of dialectal [ɩ]. It is found in these words: [bɒɩt] bite; [bɒɩl] boil; [ˈɒɩə] higher; [dʒɒɩnd] joined; [nɒɩz] noise.

68. [ɒɨ] The initial sound has the same quality and characteristics as those of dialectal [ɒɩ] above (§67). Following it is a close front-central unround vowel, very slightly lowered from the position of dialectal [ɨ]. It occurs rarely, but is illustrated in such words as [ˈbɒɨndə] binder; [bɒɨl] boil; [ˈpɒɨzn] poison.

69. [ɒɷ] The first element is the open back lax round vowel, considerably raised and somewhat centralized from cardinal 5. It is the longer and carries the greater stress. The second element is a close back round vowel, very similar in quality to dialectal [ɷ]. The diphthong appears in [kɹɒɷld] crawled; [ˈdɒɷtəɹ] daughter; [ˈdɒɷlfɷl] doleful; [ˈfɒɷldɩd] folded; [gɹɒɷθ] growth; [pɒɷl] pole.

70. [ɒu] The initial sound has the same quality and characteristics as those of dialectal [ɒɷ] above (§69). The second element is a close back round vowel somewhat lowered and centralized from the cardinal 8 position. It occurs only rarely, as in [bɒut] bought; [bɒu] bow-shaped strut of crabpot; [tjɒu] chaw, quid of tobacco; [ˈkɒunsɨləɹ] councillor; [gɹɒu] grow.

71. [ɒʉ] The first element is identical with that of dialectal [ɒɷ] above (§69). It is followed by a close back-central unround vowel, very slightly raised from and considerably more centralized than dialectal [ɷ]. This diphthong is found in the following: [gɒʉld] gold; [ɒʉm] home; [ɒʉn] own; [ɹɒʉl] roll; [ðɒʉ] though; [tɒʉld] told.

72. [ɒə] The initial element of this diphthong has the same quality and characteristics as those of dialectal [ɒɩ] above (§67). It is followed by the typical half-open central vowel of unstressed syllables and is heard in [ˈblɒətə] bloater; [blɒə] blow; [kɒəl] call; [mɒəl] mole; [ˈnɒəntiːn] nineteen.

73. [ɔɩ] The first element is somewhat lowered and centralized from the position of cardinal 6. It is the longer and bears the greater stress. The second element is the close front lax unround vowel, slightly raised from the position of dialectal [ɩ]. It is found in the following words: [ˈbɔɩlɩ] boily, bread and milk; [dɩˈstɹɔɩəɹ] destroyer; [fɔɩ] foy, salvageable wreck; [dʒɔɩs] joist; [ˈɔɩstə] oyster; [sɔɩl] soil.

74. [ɔɨ] The initial sound has the same quality and characteristics as those of dialectal [ɔɩ] above (§73). The second element is a close front-central unround vowel, very slightly lowered from the position of dialectal [i]. Examples include [bɔɨld] boiled; [ˈbɔɨələ] boiler; [ˈdʒɔɨnəɹ] joiner; [ɔɨl] oil; [pɔɨntʔ] point; [ˈpɔɨzn̩d] poisoned.

75. [ɔɷ] The first element is a sound slightly lowered and somewhat centralized from cardinal 6. It is the longer and carries the greater stress. The second element is a close back round vowel, very similar in quality to dialectal [ɷ]. The diphthong occurs in [ˈɔɷkəd] awkward;

[ɔɷld] howled; [mɔɷθ] mouth; [ˈplɔɷstɹɩŋ] ploughstring; [skɔɷp] scoop; [stɔɷp] stoop, platform.

76. [ɔu] This diphthong has the same initial element as that of dialectal [ɔɷ] above (§75). Following it is a close back round vowel, lowered and centralized from the cardinal 8 position. It is found in [əˈgɔu] ago; [ˈbɔulə] bowler, hoop; [blɔun] blown; [tʃɔu] chaw, grumble; [ˈdɔutəɹ] daughter; [ɔum] home.

77. [ɔʉ] The first element has the same quality and characteristics as those of dialectal [ɔɷ] above (§75). The second element is a close back-central unround vowel, very slightly raised from and considerably more centralized than dialectal [ɷ]. Words containing this diphthong include [ɔʉp] hope; [nɔʉn] known; [lɔʉ] low; [ˈslɔʉlɩ] slowly; [ˈstɔʉkɩn] stoking; [θrɔʉt] throat.

78. [ɔə] This diphthong begins with a sound somewhat lowered and centralized from the cardinal 6 position. The first element is normally half-long and bears the greater stress. The second element is the typical half-open central vowel of unstressed syllables. The following words contain dialectal [ɔə]: [fɔət?] fault; [ˈɔəlɩ] holy; [ˈdʒɔəkɩn] joking; [mɔəndʒ] mange; [spɔən] spawn; [tɹɔəl] trawl.

79. [ʌɷ] This diphthong occurs only rarely. Its first element is the half-open back-central lax unround vowel. It is longer than the following sound and carries the greater stress. The second element is a close back round vowel, very similar in quality to dialectal [ɷ]. Examples are [bɹʌɷn] brown; [klʌɷt] clout; [ˈfʌɷəɹ] four; [ˈnʌɷdəlɩ] northerly; [ɹʌɷ] row, propel with oars; [t͜θrʌɷ] through.

80. [oɩ] The initial element is the half-close back lax round vowel, somewhat lowered and centralized from cardinal 7. It is normally half-long and carries the greater stress. Following it is the close front lax unround vowel, very slightly raised from the position of dialectal [ɩ]. Examples of the rare occurrence of this diphthong are: [boɩ] boy; [boɩ] buoy; [spoɩl] spoil.

81. [oɨ] The first element has the same quality and characteristics as those of dialectal [oɩ] above (§80). The second element is the close front-central unround vowel, somewhat lower and more centralized than dialectal [ɨ]. It is found only rarely. Examples are [ˈboɨlɩn] boiling; [spoɨl] spoil.

82. [oɷ] This diphthong begins with the half-close back round vowel, considerably lowered and somewhat centralized from the position of cardinal 7. It is followed by a close back round vowel similar in quality to dialectal [ɷ]. It occurs in [ˈoɷldɩd] holded; [oɷp] hoop; [pɛˈtɹoɷlɩn] patrolling; [ɹoɷp] rope; [ˈskoɷnəɹ] schooner; [smoɷk] smoke.

83. [ou] The initial element has the same quality and characteristics

as those of dialectal [oɷ] above (§82). The second element is the close back round vowel, slightly lowered from the cardinal 8 position. The diphthong is heard in the following words: [blou] blow; [bou] bow-shaped strut of crabpot; [bɹoun] brown; [kouk] cook; [ˈkounsɩl] council.

84. [oʉ] This diphthong begins with the half-close back round vowel, somewhat lowered and centralized from cardinal 7. It is normally half-long and carries the greater stress. The second element is a close back-central unround vowel, somewhat raised from and considerably more centralized than dialectal [ɷ]. It appears in [loʉns] allowance, snack; [ˈboʉt͜ʔbɩldəɹ] boatbuilder; [tʃoʉkt] choked; [ˈkoʉlfɩʃ] coalfish; [ˈpoʉnɩ] pony; [ɹoʉd] road.

85. [oə] The initial sound has the same quality and characteristics as those of dialectal [oʉ] above (§84). It is followed by the typical half-open central vowel of unstressed syllables. The diphthong is heard in [ˈbloətə] bloater; [ˈboədɩn] boarding; [boət] bought; [koəz] cause; [floət] float; [voət] vote.

86. [ɤɷ] The initial sound is very slightly lower but considerably more centralized and less rounded than dialectal [o]. It is followed by a close back round vowel which has a position of articulation similar to that of dialectal [ɷ]. It occurs only rarely, and is heard in such words as [ˈbɹ ɷnɩn] browning; [ɤɷs] house; [ɹɤɷnd] round; [ʃɤɷtʔ] shout; [ðɤɷ] though; [tθrɤɷ] through.

87. [ɤu] The first element has the same quality and characteristics as those of dialectal [ɤɷ] above (§86). The second element is a sound slightly lowered from the cardinal 8 position. It is of very rare occurrence, and appears in [ɐˈlɤu] allow; [kɤuk] cook; [ˈkɤunsɩlə] councillor; [dɤut] doubt; [ɤutʔ] ought.

88. [ɷɩ] The initial sound is somewhat raised from the position of dialectal [ɷ]. It is normally half-long and bears the greater stress. Following it is the close front lax unround vowel, slightly raised from dialectal [ɩ]. This diphthong, which is very rare, is heard in [bɷɩ] buoy; [lɷɩ] lea, scythe; [ɹɷɩnd] ruined.

89. [ɷɨ] The first element has the same quality and characteristics as those of dialectal [ɷɩ] above (§88). The second element is the close front-central lax unround vowel, very similar in quality to dialectal [ɨ]. This rare diphthong is found in the following words: [ˈkɷɨdɩɹɔɩ] corduroy; [fjɷɨd] feud; [ˈnɷɨtɩsəbl] noticeable.

90. [ɷu] The initial element is the close back lax round vowel, somewhat more centralized and considerably less rounded than dialectal [ɷ]. Following it is a close back round vowel, slightly lowered from the position of cardinal 8. The diphthong appears in [bɷuns] bounce;

[fɷul] foul; [lɷud] loud; [mɷuθ] mouth; [stɷuk] stook; [ˈθɷuzənd] thousand.

91. [ɷʉ] This diphthong begins with a close back lax round vowel which has a position of articulation very similar to that of dialectal [ɷ]. It is normally half-long and bears the greater stress. Following it is the close back-central unround vowel, slightly raised from and considerably more centralized than dialectal [ʉ]. It occurs in [ˈbɷʉdɩd] boarded; [ˈbɷʉɹɩn] boring; [dɷʉl] dole; [ˈpɷʉlɩ] poorly; [ʃɷʉt] short; [tθɷʉn] thorn.

92. [ɷə] The initial element has the same quality and characteristics as those of dialectal [ɷu] above (§91). The second element is the typical half-open central vowel of unstressed syllables. Examples are [əˈkɷədɩnlaɩ] accordingly; [fɷək] folk; [ˈfɷəʃɷə] foreshore; [lɷən] loan, lane; [ˈɹɷədsɑːd] roadside; [sɷəd] sword.

93. [uʉ] A sound somewhat lowered and slightly centralized from cardinal 8 forms the first element. It is usually half-long and carries the greater stress. The second element is the close back-central unround vowel, very slightly raised from and considerably more centralized than dialectal [ʉ]. The diphthong is heard in [kuʉl] coal; [duʉ] door; [fluʉɹ] flour; [puʉ] poor; [ɹuʉd] road; [suʉt] sort.

94. [uə] The diphthong has the same initial sound as that of dialectal [uʉ] above (§93). It is followed by the typical half-open central vowel of unstressed syllables. Words containing this diphthong include [uənd] horned; [ˈnuəzbʉnd] noseband; [ˈɹuəɹəl] rural; [spuət] sport; [θruət] throat; [tɹansˈpuətɩd] transported.

95. [ʉɷ] This diphthong begins with the close front central unround vowel, somewhat lowered from and more centralized than dialectal [ʉ]. It is followed by a close back round vowel very similar in quality to dialectal [ɷ]. The following words contain the diphthong: [bʉɷz] booze; [gʉɷn] gown; [ʉɷf] hoof; [ˈmʉɷvɩn] moving; [sʉɷnd] sound; [tɹʉɷθ] truth.

96. [ʉu] The first element has the same quality and characteristics as those of dialectal [ʉɷ] above (§95). The second element is a sound somewhat lowered from and less rounded than cardinal 8. Examples include [kʉunt̮ʔ] count; [kɹʉun] crown; [ˈdɹʉundɩd] drownded; [ɩˈnʉu] enow, presently; [fɹʉut ʔ] fruit; [mʉunt] mount.

97. [əɩ] This diphthong begins with the half-open central lax unround vowel. The second element is a close front lax sound, very slightly raised and fronted from the position of dialectal [ɩ]. It is of rare occurrence and is found in such words as [fəɩld] field; [ləɩv] leave; [nəɩt] night; [pɹəɩs] price; [təɩ] tea.

SWEDISH SPEECH IN AN ENGLISH SETTING: SOME OBSERVATIONS ON AND ASPECTS OF IMMIGRANT ENVIRONMENTS IN AMERICA

By FOLKE HEDBLOM

During the approximately one-thousand-year history of the Swedish language, it has only once to any great extent[1] been removed from its historical setting, taken to a different continent, isolated, changed, and as a minority language there subjected to such a powerful outside influence that it finally succumbed and died out. This occurred in America during the course of less than 100 years, beginning in about 1840. The process is of course part of the history of Swedish emigration in general.

A great number of the Swedish population emigrated. When the great emigration started, the country had somewhat more than 3 million inhabitants, and by the beginning of this century more than one million Swedes had moved to the New World. The population of Sweden was then about 5 million.

In the middle of the nineteenth century Sweden was a typical agrarian country. The emigrants of the first few decades were farmers, farmers' sons and farmhands who left for America to find more and better land to cultivate, land which would afford them a better living and future. It was not until the latter part of the nineteenth century that industry began to attract large numbers of Swedes. In 1900 agriculture and forestry employed about 33% of the immigrant Swedes and their children. Industry then employed about 35%.[2]

The majority of the Swedish rural immigrants settled in the Midwest States, especially Minnesota, Illinois, Iowa, Nebraska and Kansas. The hot climate of the southern states did not attract the Swedes, with the exception of Texas. As early as 1838 a large colony was established there with cotton and sugar cultivation as the main sources of livelihood. The immigration into the Mountain and Pacific States came later; it took place above all in the early years of the twentieth century, and the immigrants were mainly employed in forestry. There was a large Swedish settlement in and around Seattle.

The first rural farm immigrants mostly travelled in small or larger groups from the same limited area of Sweden. They settled close together and formed homogeneous settlements where relatives and friends from Sweden soon joined them. The later emigration was mainly individual. Those who sought industrial employment went to places where there were already people from home who could help them to get settled. A large number of them settled in the New England States, particularly in New York, Connecticut and Massachusetts. Many also went to Chicago and other towns in the Upper Midwest, where most of them worked in the building trade, in mining or forestry. The Swedish immigration was at its height about 1890, almost entirely ceased during the First World War, and has since then been only slight.

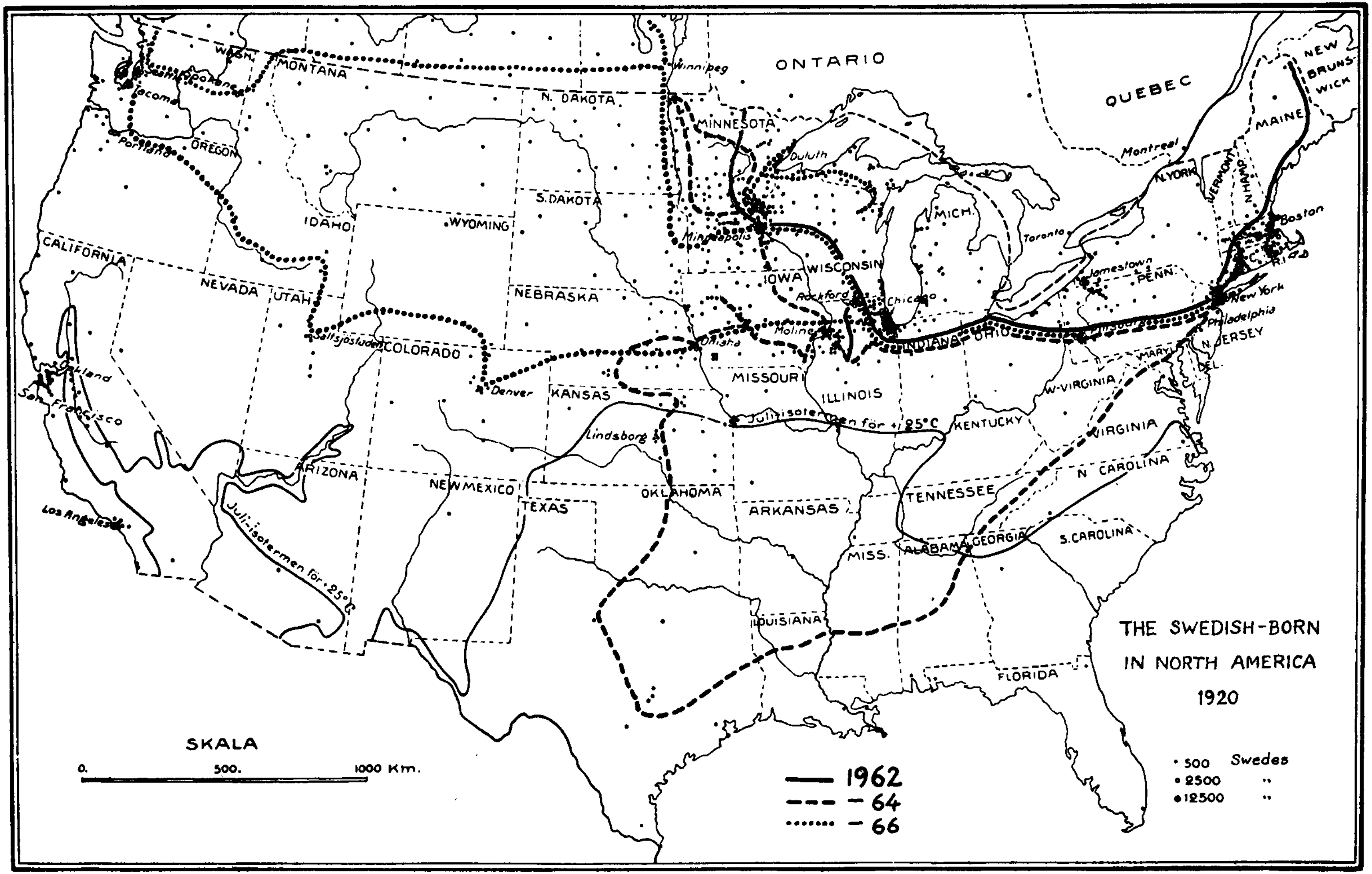
The early Swedish settlers were on the whole working people without much education, sons and daughters of farmers, farmhands and servant girls, but they had definite cultural ambitions. When they established their settlements they tried to reproduce the best of the society in Sweden they came from and they wanted for their children the educational facilities that in Sweden had more or less been reserved for the children of the upper classes. At almost the same time as they built their simple dwellings of lumber or prairie-sod they built churches, established parishes, mainly Lutheran, adhering to the State Church of Sweden, employed clergy and started their own schools in which their children could learn to read and write Swedish. These continued to function as summer and confirmation schools until the 1920's. Until that time the children and grandchildren of the older immigrants could not speak English when they started their compulsory education in the American public schools at the age of eight.

Community feeling among the Swedish immigrants was encouraged by a large number of Swedish newspapers and many associations and clubs, idealistic, religious and financial. But their communities were never completely sealed off and isolated from their surroundings. The only exception for a short time was Bishop Hill, which will be mentioned below. The Swedish attitude towards "Americans" and immigrants of other nationalities was in general open and unreserved, even though they were very conscious of their own superiority as regards working capacity, honesty, and suchlike virtues. After some years, when they had a good enough knowledge of English, they also began to take part in public affairs and voted their own people into administrative posts in places where they were in the majority.

This openness towards their surroundings meant of course significant changes in the Swedes' pattern of life and also in their language. The influence of English on both speech and writing became more and more noticeable and caused concern on culturally conscious circles. But, in general, the existence of Swedish as a minority language in America was not considered in any way threatened. As late as the turn of the century it was assumed in certain places that Swedish in America would live on as a special branch of the Swedish standard language, characterized by "necessary" loan-words from English.[3] This did not happen however. The decline of Swedish proceeded at a brisk pace, especially after World War II, and at the beginning of the 1960's the last and most stubborn strongholds of the Swedish language in America, the churches, ceased to exist as specifically Swedish organizations. They have now been merged with their American counterparts. Of the hundreds of Swedish-language newspapers there are now only five in the U.S. and one in Canada. Swedish in America is now only a language spoken in the family circle and on social occasions, and even here it is disappearing more and more.

Many other European "colonial languages" in America have suffered similar fates in various ways and to a somewhat varying degree. Some of them have been investigated by experts. Norwegian, for example, has been the subject of a detailed, pioneer work by Einar Haugen.[4] American Swedish was almost unknown to language scholars until the beginning of the 1960's. In 1962, 1964 and 1966, research expeditions were sent out from the Institute for Dialect and Folklore Research of Uppsala, Sweden (Landsmåls-och Folkminnesarkivet i Uppsala) on the initiative of its Director at that time, Professor Dag Strömbäck. The idea was to collect as quickly as possible by means of tape-recordings representative, authentic text samples of the Swedish speech in different parts of "Swedish America." The impetus and driving force behind this task was the widespread supposition in Europe that nineteenth-century dialects had been preserved out there in their isolated setting, free from the influence of the standard language at home, as so-called "frozen dialects." This interest in dialects must be seen against the background of Sweden's many powerful dialectal contrasts among the 25 historical provinces of the country. Within these there are often great variations among church parishes and again among the villages. Many dialects are extremely archaic in both grammar and vocabulary and quite incomprehensible to outsiders.

The three expeditions, lasting for 3 or 4 months each, covered the greater part of the Swedish settlement area in the U.S. as well as Manitoba in Canada. The specially equipped recording van of the Institute, a minibus containing tape-recording equipment of a professional type and driven by the Institute's technical expert, Mr. T. Ordéus, was sent over to America. The writer acted as leader and interviewer. The material was collected during the course of conversation, generally in the speaker's home. We had been given a list of suggested speakers by newspapers and the radio in Sweden and America



The routes of the Uppsala tape recording expeditions in 1962, 1964 and 1966. (The population map is reproduced from H. Nelson's *The Swedes and Swedish Settlements in North America*, 1943).

but we came across the best speakers on the spot, quite often by pure chance. The result of the expeditions is contained in more than 400 tapes, each lasting half-an-hour, kept at the Archives in Uppsala. So far only a few of them have been analyzed. They represent only a preliminary survey of Swedish speech in America, based on speakers chosen at random, but nevertheless representative. This collection should, before it is too late, which may be very soon, be supplemented by depth investigations of different kinds in some of the best-preserved settings.

The aim of this article is not to present new investigation results but to give British readers an introduction to a new collection of linguistic field-material, as a token of respect to Professor Harold Orton who was himself from 1924-28 a highly esteemed linguistic scholar at Uppsala University, and is still today a very great friend of ours at the Institute.

It was realized right at the beginning of the first trip that the recording programme could not be confined to hunting for conservative dialect speakers. It had to cover American Swedish speech in general with the emphasis on dialectal speech. This is the line that has been taken throughout.

To begin with we had only a vague idea of where we should find Swedish best preserved and where Swedish dialects were still spoken. We started in Chicago ("one of Sweden's biggest cities") where Professor Gösta Franzen of the University of Chicago, a former Uppsala scholar, had made preparations and introduced us to Swedish settings. In the Swedish Old People's Homes there were plenty of pre-1900 immigrants. The dialect they spoke was, however, more or less levelled out, a sort of sub-standard Swedish. Only English features of vocabulary and phonology distinguished it from the levelled-out provincial Swedish (containing more or less obvious dialectal forms) which is heard in small towns and newer communities in the country in Sweden. In the larger cities of America, people from different dialect areas have mixed, intermarried, established clubs and religious groups etc., and the most striking dialect features have been levelled out. The levelling process has tended towards the Standard Swedish that the emigrants learnt at school in Sweden and which their children heard in church, at summer schools and clubs. From the point of view of the contact of Swedish with English these recordings of speakers of the first immigrant generation were very valuable. We met very few second-generation Swedish speakers here.

In the small towns west of Chicago we heard more archaic dialect.

An almost 90-year old woman, who emigrated in 1903, was so intelligent and had such a gift for language that when she realized that I wished to hear her speak in her childhood tongue, she changed from the Southern Swedish sub-standard that she normally used and told me about her childhood in Sweden in the dialect she had spoken then. She used, for example, certain plural forms of the verb which have not been heard in her native Swedish village for a long time. But she was an exception. As far as the second generation[5] is concerned, we found in these rural milieus in Illinois that the children of immigrants still living seldom speak Swedish, even if some of them understand what their parents are saying. On the other hand, there are quite a number of Swedish-speaking second-generation immigrants, now of retirement age, among the children of the earliest immigrants.

After these first experiences I began to doubt whether the talk of "frozen dialects" had any real basis, but after three weeks we suddenly found what we were looking for. It was in the little community of Bishop Hill in Illinois (*c.* 150 inhabitants), one of the oldest Swedish settlements in America, with a unique history. It was established in 1846 with the first and largest group emigration from Sweden. A religious zealot named Erik Jansson had with his followers, about 1,500 in all, most of them from the province of Hälsingland, emigrated to America and organized there a religious, communistic society in which all property was held in common and everyone worked together under the guidance of the prophet. After his death in 1850, however, the organization broke up, many left the community and the land was divided up into private farms. To begin with, the community was a closed one, and no-one was allowed to marry an outsider. All this ceased after the dissolution of the colony but today the village is still off the beaten track, away from the main roads. A number of new immigrants from the same part of Sweden moved in during the decades that followed. Bishop Hill was the only Swedish settlement in America that might have developed into something like the well-known German Amish colonies in Pennsylvania. There is nothing Swedish in America corresponding to "Pennsylvania Dutch" or "Pennsylvania German."[6]

We had been told that Swedish was now more or less extinct in Bishop Hill but luckily this was not the case. The most interesting people from a dialectal point of view were a pair of twins of the third generation, born in 1906. Their maternal grandfather and grandmother were among the first colonists, and their father had entered America with his parents in 1875 at the age of ten. They came from the same part of the province of Hälsingland. When the two sisters started to speak Swedish I heard at once that they were using an archaic South

Hälsingland dialect. This was the only form of Swedish they had learnt, the language of their childhood home. At school they learned English and they used this language with outsiders. They told me that, as children, they were so used to language "switching" that they were not really sure which language was English and which was Swedish. They had to ask their mother! They understood that their language was not "good" Swedish; they said they spoke "Bishop Hill Swedish," the dialect that had probably been used by the majority of the older immigrants. But the other second- and third-generation immigrants we met at Bishop Hill mainly spoke a levelled-out form of Swedish with only a few pure dialectal features. Why the language of the two sisters had remained so conservative is not clear. They seemed intelligent and normally sociable. Probably it was due to a certain extent to personal disposition. English was now their family language and their children did not understand Swedish. The strange thing was that the husband of one of them, an emigrant from Sweden as late as 1928 had great difficulty in speaking Swedish. He had seldom used the language since he had learnt English and, when he tried, his articulation proved to be greatly influenced by the local English speech. We later came across several similar cases.

Our experience in Bishop Hill taught us that Swedish dialects in America, in exactly the same way as in Sweden, were to be found in rural areas. Further, we had to look for them in places where the Swedes had been in the majority and had come from the same area of Sweden. The speakers would probably be second- and third-generation immigrants who might be assumed to have preserved important features of the nineteenth-century dialect taken to America by the earliest emigrants, not emigrants who had left for America after the dialectal levelling had established itself in Sweden. Only in a few exceptional cases were we able to record well-preserved archaic dialect speech from old emigrants. These were all people who had not had much opportunity to use their native tongue but had lived in wholly English-speaking surroundings. In these cases the interference of English was remarkably limited.

We found a large early settlement north and north-east of Minneapolis in Minnesota, in the counties of Isanti and Chisago. Swedes from the provinces of Hälsingland, Dalecarlia and Småland had been the first white settlers here in the 1850's and for a long period they had, particularly the Smålanders, been in the majority and owned almost all the farms over a vast area. The farms are still to a great extent owned by their grandchildren and these proved to have preserved the dialect of their elders surprisingly well. This was partly due to the fact that the oldest generation had lived in the homes of their children and grandchildren until they died. In some cases the oldest "log-house," built in Swedish style, was still part of the present dwelling. The old people had apparently been almost entirely monolingual; they had spoken very poor English. The grandchildren told us that they had to speak to their sometimes rather deaf grandpa in his own village dialect. That was the only language he understood properly! We were told how they had worked with father and grandfather out in the fields and woods every day and had helped grandma with the housework. In their childhood they had not had much contact with outsiders except travelling salesman and such sporadic visitors. Grandpa's and grandma's Swedish dialect was the only language they had used, and from the dialect one could tell from which part of the settlement people came. The children mostly knew nothing about Swedish provinces like Östergötland and Småland but they could perfectly well discriminate between the speech differences of the people from those areas. Even when they spoke English one could hear in "the Swedish dialect" where they came from. They had not normally learned English until they went to school, and as recently as the years just before the First World War the children used only to speak Swedish during the school holidays.[7] Nowadays English is the family language everywhere in the homes. The fourth generation does not know Swedish. Our youngest informant among the third generation was born in 1921. His dialect was almost perfect without any noticeable "foreign accent." His wife understands but does not speak Swedish and his children understand nothing but English.

The above remarks apply mainly to the numerically largest group, the people from the province of Småland, but also to a great extent to those originally from Hälsingland and Värmland. The latter have settlements west of Minneapolis. The dialects of all these groups were for the most part understood by other Swedes. This was not however the case with the dialects spoken by the emigrants from Dalecarlia. These are completely incomprehensible to outsiders and also to people in the neighbouring parishes. But the Dala people were accustomed to using a modified standard Swedish when speaking to outsiders, and in their communities people were therefore trilingual. When we visited third-generation immigrants still living in their farmhouses, as a rule people of 70 or 80, the conversation was carried on in the archaic parish and village dialects of the emigrants. But for these recordings I had to enlist the aid of an "interpreter," who put my questions in dialect to the speakers.

The fact that the second and third generations in such linguistically homogeneous settlements are those that have best preserved the dialect of the earliest emigrants was also true of Texas and Kansas, Nebraska and Iowa. In these states the Swedes had been among the earliest immigrant groups in the 1840's and 1850's and there had been so many of them that their dialect had been locally predominant. In Texas Swedish is still spoken among the older second-generation immigrants but in the other states, where the flow of immigrants ceased in the 1890's, there are only a few conservative individuals who still preserve the language of the old immigrant colonies. Many Swedes have moved to the cities and people of other nationalities have bought their farms. Rationalization in agriculture has also greatly contributed to the depopulation of the countryside.

The Swedish immigrants in the Mountain and Pacific States mainly came from the north of Sweden, and most of them probably spoke in a levelled-out dialect even before they emigrated. The bulk of them were forestry and industrial workers, a migrant population that had to move from place to place to seek work. On the whole, Swedish has not survived the first generation. The same is true of the Mormons in the state of Utah. The Mormon Church was, earlier on, against foreign language groups. English was the language of the Church and this served to hasten the language change. We recorded a number of emigrants there but only a few second-generation people.

A unique feature of the history of Swedish settlements in America is the "Gammalsvenskby" (Old Swedish Village) people in Manitoba, Canada, whose language we recorded in 1966. Their forefathers were forced in 1781 to move from the island of Dagö in the Baltic Sea, formerly belonging to Sweden, to southern Russia, where they retained their nationality and their conservative village dialect right up to modern times. In 1929 almost the whole village population moved to Sweden and some of them went on to Canada, where they built up a village of eight large farms on the prairie. The village is quite unlike the surrounding ones in the fact that the farms are situated in a cluster, not far from one another. In this village the Swedish eighteenth-century dialect from South Russia is the language used. The younger people are bilingual, speaking the village dialect and English, while their elders are most often able to speak five languages: dialect, Standard Swedish, Russian, German, and English.

There are more than 550 voices recorded on our tapes at the Institute. Their colloquial Swedish represents a practically unlimited number of variations, from archaic seventeenth-century dialect to a standardized Swedish in which little more than intonation and accent reveal the dialectal background of the speaker. As far as the influence of English is concerned, there are also all possible variations from single words and anglicisms to such uninhibited "mixing" that the listener sometimes wonders which language the speaker thinks he is speaking. We have also quite a number of recordings of the Swedish of educated Swedish Americans, with its limited use of both dialect and English words and its efforts to approach as far as possible the language patterns of Sweden. Even our speakers' ways of switching from language to language during the conversation and their manner of speaking English are recorded on the tapes.

The most striking feature of American Swedish—whether it is dialectal or levelled out—is its extreme archaism. This general conservatism, both in speech and writing, is a well-known trait of emigrant languages both in America and other places. In Scandinavia the languages of Iceland and the Faroes are outstanding examples.[8] In addition may be mentioned the Swedish dialect of Gammalsvenskby in southern Russia and the kind of Finnish spoken until modern times by the Finns who moved to northern Värmland in about 1600.[9]

It will be understood from the above that the really conservative dialect speakers were almost entirely found among the second- and third-generation Swedes who grew up in a homogeneous, isolated, rural setting in America. It was only in exceptional cases that we found them among the immigrants of the first generation. Even the older of those who left Sweden before 1900 had in most cases levelled out their language before they emigrated or had come to live in dialectally heterogeneous settings in America, or both. Exceptions were those who had come direct from an isolated community in Sweden to a similar milieu in America. A typical case was a 90-year-old woman from the forests of northern Värmland who had emigrated with her parents and 10 brothers and sisters at the age of 17 in 1891. The family settled on a farm in the forest area of north-western Minnesota, where she was still living in 1964 and still preserved her old village dialect. Her son, aged 65, had his mother's morphology in all essentials, but as for phonology and accent his speech was influenced by other dialects of his environment, above all by his father's Härjedalen speech.

When I say that the dialect we recorded among second- and third-generation speakers was archaic this must not be misunderstood. It does not of course mean that our recordings contain elements of phonology, grammar, vocabulary, etc. which until now have been unknown to scholars in Sweden. One must remember that there have been systematic dialect investigations in most of Sweden's 2,500 church parishes since the 1890's, that certain records phonetically transcribed were made even earlier, and that systematic gramophone recordings of living connected speech have been made since 1935 in all the Swedish provinces. But in spite of this, it is of course not impossible that discoveries concerning the existence and distribution of certain dialectal features in Sweden during the latter half of the nineteenth century may be made when we analyze in detail our American recordings. They also give us certain dating possibilities. On the other hand, it is clear that it would not have been possible to record in Sweden in the 1950's and 1960's texts of connected speech that are as consistently archaic in the choice of words, syntax, and style as those we brought back from America.

Here and there in the recordings we can hear words or grammatical points which have long been extinct in the original Swedish village. A couple of examples may be mentioned. An 86-year-old informant in the Värmland dialect, whose parents had emigrated in 1869 from the same parish in Värmland and who himself had never been to Sweden, spoke in such an archaic way that an expert who knows the same dialect says that it would be impossible to record a text like it in Värmland today. The old man told us how in his childhood, craftsmen of different kinds, tailors, shoe-makers and the like went around from farm to farm in the settlement in Minnesota in the same way as was customary in Sweden. They stayed for a while at each farm making clothes, shoes, etc. of the material or leather that the farmers themselves had produced. He spoke of them as "ämbetsmän" ("officials"), a word which in modern Swedish means "higher civil servants," but which before the abolition of the guilds in 1846 meant "craftsmen organized in a guild." The word presumably disappeared from the Swedish dialects long ago. A 73-year-old man, who emigrated from Dalecarlia with his mother and brothers and sisters at the age of eleven and whose dialect is quite incomprehensible to outside Swedes, used in his speech grammatical constructions that the present expert at our Institute had never heard in Dalecarlia in living speech but knew had existed earlier. Since he grew up the speaker referred to has mainly spoken Standard Swedish or English.

There is therefore without doubt some justification for the theory of "frozen dialects" in cases where several factors have combined to protect the speaker's dialect from alien influences of different kinds. In addition to the geographical and social isolation that I have spoken of above it was obviously of significance that the speaker or his parents or grandparents had come direct from Sweden to their settlement in America. So-called secondary settlements, established by people who had lived in other places in America earlier, were usually characterized by linguistic levelling. This is often the case in Kansas and Nebraska. It is also important of course for the speaker himself not to be easily influenced by outside linguistic influence.[10] The above-mentioned speakers were, I think, of this type. In genuine cases of archaic dialect the wife or the husband of the speaker often did not speak Swedish at all, or in one case had the same dialect. When the husband or wife had a different dialect it usually helped to level out that of the partner.

As an example of an archaic third-generation speaker may be mentioned one of our latest recordings. We met the speaker by chance in Cambridge, Minn., in 1966. He is a mechanic by profession and has a machine shop. We went along there to have a look at a renowned model of an old-time "steam-engine" (locomobile) he had built. We were told he was Swedish and I addressed him in Swedish. When he answered I was amazed. Never before in America had I heard such a strikingly genuine archaic dialect among the numerous Hälsingland people I had met there. He spoke fluently and naturally without any hesitation or uncertainty, "naïvely" in the best sense of the word. When I asked him from which parish he came, he answered: "I have never been in Sweden, I was born here." He was born in 1904. But his parents? They had also been born in America. His grandpa and grandma came from Sweden. From which part of Sweden? "I don't know but they used to talk about Hälsingland." What and where this Hälsingland was he had not the faintest idea. As he was busy in his shop just then we were not able to continue the conversation but we were invited to come back the next morning, a Sunday. Standing at his oily work-bench with a map of Sweden spread out in front of us, with the microphone in my hand and the recording bus outside, we talked about his childhood in a Hälsingland immigrant colony, one of the oldest settlements in the vicinity, possibly founded in the 1850's but now abandoned by the Swedes. His maternal grandparents came direct from Sweden, probably in 1869, and their North Hälsingland dialect was the everyday speech of the colony. At school the children learnt English and there they heard other children speaking in the Småland dialect, but they don't seem to have had much contact with them. He stayed on his father's farm until he grew up and then he worked in a factory in Minneapolis for about twenty years. During that time he hardly spoke Swedish at all. His wife did not speak Swedish and the everyday language of Cambridge is nowadays English.

Our interview with him lasted for an hour. I have transcribed it but have not yet had the opportunity of analyzing it in detail. So far the following observations may be made.

Almost all the characteristic features of the phonology and grammar of the dialect, such as I know it from the gramophone and tape recordings made among old people in the 1940's and from the early manuscript collections of the Institute, are preserved in his speech. The phoneme system and its phonic realizations are intact. Not even as regards the normally sensitive *o* and *r* sounds has his Swedish articulation been influenced. Only the North Swedish palatalization of [k] > [tç], [g] > [dj] and [ŋ] > [nj] has been abolished in conformity to Standard Swedish. This is also mostly the case among modern dialect speakers in the Swedish parishes of Hassela-Bergsjö in Hälsingland.

Nor does the morphological system seem to differ essentially from the older dialect. This is also not surprising, as in "language contact" the morphology always seems resistant to foreign influence.[11] The speaker's deviations are very few.

The same applies to the prosodic factors, stress, tone (melody), and quantity. There is no "foreign accent" whatever in this man's speech apart from loan-words retaining their American form partly or entirely. His syntax is also consistently archaic, as are his style, choice of words and manner of expression, with the few exceptions mentioned below.

What distinguishes his speech from the language of the original Swedish village is of course the loan-words from English. The bulk of these words are the same as those used by most American Swedes and Norwegians, denoting new phenomena which did not exist in the home country, e.g. *railroad, train, stove, haymower,* but also for concepts which had their own equivalents in the home country, e.g. *log, pine, country, grandpa, grandma, different, plenty, cut, keep, treat,* etc. The reason for this extensive borrowing is often enigmatic. Haugen (1956) writes: "The new words did not necessarily represent new objects or experiences, but they inevitably brought with them new attitudes toward experience" (p. 31). The language was part of the whole adjustment of the immigrant to a new society and to a new way of living and thinking, something which has been called the process of 'acculturation'.

As far as single words are concerned, certain observations can be made. Thus in our text, *plenty* is used only partitively, *plenty gem* (game), *plenty fisk* (fish), etc. For the rest the Swedish equivalent *mycket* is used. (This is different from Norwegian; see Haugen (1953), p. 588.) Special types are hybrid loans (or "loan-blends," Haugen) such as *cord-ved* [ˈkoː veː] "cord-wood," *pine-skog* [ˈpajnskuːg] "pine-forest," *jarn-mina* [ˈjaːnmiːna] "iron-mine," *pär-diggrar* (plur.)

[ˈpɛ:dig:rar] "potato-lifters," *pärdigg-länkar* (plur.) [ˈpɛ:diglɛŋkar] "part of elevator of a potato-lifting machine," *sä-fil* [ˈsɛ:fi:l] "cornfield," etc. There are also translation loans (or "loanshifts," Haugen) and other types. The English loans that occurred in our speaker's dialect and the changes they had undergone coincide to a great extent with the corresponding Norwegian loans. I refer to Haugen's detailed presentation.

A characteristic of the English loans in this speaker's language was the fact that they had been phonetically and morphologically integrated to a high degree. Words like *railroad, jarn-mina, cut* and *treat* have the articulation, inflection gender, etc. of the dialect. The word *plenty* has the normal Northern Swedish pronunciation with the retroflected ("thick" or "one-tap") *l*. The female *schoolteacher* is called [ˈsku:lti:tça], with the feminine suffix *-a*. The speaker himself obviously was not aware that these words, which he must have inherited from the older generations, were not as Swedish as the rest of his vocabulary. They were as Swedish to him as the many older German and French loanwords in Standard Swedish are to the Swedes in Sweden. In certain cases his substitution of sounds is facilitated by the fact that the phonic variant of the dialect is very close to or coincides with that of English, e.g. [ʌ] in words like *up* [ʌp]. The rather few cases of partial or vacillating adaptation agree to a great extent with the examples given by Haugen (1953), pp. 449-53. We have, for example, the use of the English plural ending *-s* in *tings* (things), *tulls* (tools), etc.

Younger, temporary loans normally keep their American form unchanged. From the text may be mentioned such words as *bottle-gas, gauges, pretty good* and *veterinarian.* When the speaker supposes that the interviewer does not understand the loan-word *deer,* pronounced with Swedish articulation, he repeats it in the English form, all the sounds then being automatically replaced by the corresponding American ones. As regards newer, temporary loans and one-time loans[12] the second and third generations differ greatly from the first generation of Swedes, who do not have clearly distinct patterns of articulation and inflexion and can therefore never be such perfect bilinguals as their children and grandchildren.

It has often been pointed out that the native tongue of the immigrants suffers great losses in vocabulary. This is also the case with our speaker. When the conversation touches upon characteristic phenomena of the Swedish place of origin, such as the mountain pasture system, he does not even know what it is. The most common words in the wide terminology of this vital aspect of the Northern Swedish farm-culture are completely unknown to him. The same applies to the flourishing flax-dressing procedure of his Swedish home-parishes. Even a common Swedish word like *by* (village) has gone out of his vocabulary. Instead he says *country-stad* "country-town." The range of functions of his mother tongue[13] is strictly limited.

As mentioned already, the loans relating to syntax and style are fairly infrequent in our speaker's language. His negation is "no," but "yes" is rarely used. He sometimes starts a sentence by "Well" and he very often inserts a *vet du,* probably based on the *you know* pattern. He also follows the English pattern in question-tags like *är det*? "is it?," *är det inte*? "isn't it?," *gjorde de* "did they?" There are a few cases of a non-Swedish use of prepositions. But the speaker never borrows conjunctions like *and, but, because,* which are so common in our recordings of first-generation speakers.

Our first survey of this third-generation Swede's dialect shows it to be extremely well preserved in the state which it must have been in when his grandparents emigrated at the end of the 1860's and which we are acquainted with partly through our older collections of manuscripts and gramophone records. Most of the inhabitants of the Hälsingland settlement he grew up in must have spoken in this way. But there were probably variations. Those who associated more with other Swedes certainly levelled out their speech to a much greater extent. We have good examples of this in families in which we recorded several brothers and sisters. The same goes for people who were not of the same conservative disposition as our speaker.

I have chosen this speaker as an example, mainly because his dialect is one of those I know best. The remarks and observations made in this case can, however, probably be applied to a great extent to the rest of the above-mentioned examples of archaic dialect preserved in the language of second- and third-generation speakers. In all cases, with the exception of the Dala people, the speaker is from the Swedish point of view monolingual; the speaker knows no other form of Swedish than his dialect. But their main language is nowadays English and when they get excited or tired in the course of conversation they often switch to English. This language-switching should of course be studied more closely on our tapes. As far as the analysis of their dialect is concerned it must be emphasized that this can only be carried out by trained regional experts, if possible by those whose native language is that particular dialect and who have the right feeling for values and shades of meaning, as well as for the different ways older and younger people have of expressing themselves.

These extremely conservative dialect speakers, about twenty in all, form a very small minority of those we have recorded. The majority have a dialect that has been levelled out in varying degrees and different ways. This applies to all three generations and all parts of "Swedish America." To sum up, it may be emphasized that in modern Swedish America it is among people of the second and third generations that we find the purest Swedish, both as regards a well-preserved dialect and resistance to borrowing. On the whole, they have two separate language systems which they automatically keep separate.

The levelling-out of dialects occurred wherever the Swedes met, at work, at clubs, in churches, schools and homes. In mixed communities the majority have generally been responsible for linguistic development. To speak like most other people is considered "refined," socially correct, and proper. In the Småland-dominated Texas settlement the children of Scanians do not appear to have adopted the language of their parents but rather the levelled-out Småland dialect of the majority. In a colony in Enterprise, Kansas, the majority of the emigrants were from the province of Gästrikland. One couple, the wife from Östergötland and the husband from Gotland, explained that they always talked English to the other Swedes because the Gästrikland people "did know how to talk, but we didn't." In some cases the children at school teased one another about their dialects and this often led to a switch in dialect. A farmer in Darwin, Minn., born in that vicinity in 1884, and speaking in a well-preserved Värmland dialect, told us that his father had emigrated from Värmland in 1876 and his mother from Dalecarlia in 1877. They had married in 1880. When he and his six sisters were small they had used only their mother's Dala-speech, which was quite different from their father's Värmland dialect. At the first school they attended only English was spoken but when they were moved to another school where almost all the children were Värmlanders, these made fun of their Swedish. They then began to adopt their father's dialect. But as long as their maternal grandmother was alive they had to continue speaking to her in the Dala-dialect, and it was only after her death and their mother's that they abandoned this dialect completely. Now they only remembered a few single words. The brother still speaks in a conservative north Värmland dialect without any distinguishable Dalecarlian features. His two sisters, who were interviewed at the same time and who had not stayed in their native settlement but had been a nurse and a teacher respectively, in different places, spoke levelled-out American Swedish with a slight Värmland ring.

It has been mentioned above that either the wife or the husband could "correct" the Swedish of his or her partner. In general, it appears that the one who spoke the dialect nearer Standard Swedish was more likely to win the day. A man in a Swedish colony in Wisconsin, where most people spoke in the Småland dialect, said that in his childhood his mother had spoken in this dialect, but when she had remarried a man from Västmanland (not far from Stockholm) she had adopted his dialect. A man from the province of Dalsland told us that he was teased about his dialect by a work-mate who had emigrated from Stockholm, and he had taken it so to heart that he switched to English. The large number of American Swedish newspapers encouraged this development towards what people thought of as Standard Swedish or "High Swedish," a model language which was considered constant, unchanging. The linguistic endeavours of these newspapers were concentrated mainly on the loans from English, the "mixed language" against which they fought a long and bitter battle.[14]

Apart from the linguistic aspects, our tapes also contain information and descriptions of historical, cultural, and biographical interest, which provide a meaningful background to the fate of the language. Old emigrants describe conditions in the Sweden of their childhood, the reasons why they emigrated, the voyage, the difficulties and satisfactions of the first few years. Speakers of the second and third generations remember what father and grandfather told them about the earliest settlements in the forests and on the prairies of the Midwest, where their nearest neighbours were Red Indians and where they lived their daily lives according to the ancient pattern of the self-contained economic units of Swedish villages before the modern monetary system was introduced. They told us about their work and play, their churches, superstitions and popular medicine, their relations with other groups in the community, and the changes brought about by the great "acculturation" process. Told in their own language and seen from the personal point of view, these recollections should provide a fine supplement to the written sources of information.

Of course I now find that a great deal of the material we collected is incomplete or one-sided. It is already more difficult to supplement it with new material from America, as we were able only in exceptional cases to use speakers under the age of 65. But even in their present state, our recordings should give us considerable insight into an aspect of the Swedish language which some years ago was *terra incognita*.

NOTES

[1] I leave out of account the Swedish colonization of the land around the mouth of the Delaware River 1638-55, where the Swedish language was kept for about 150 years. See Amandus Johnson, *The Swedish Settlements on the Delaware*, 2 vols. (New York, 1911).

[2] H. Nelson, *The Swedes and the Swedish Settlements in North America*, 2 vols. (Lund, 1943), I, 66.

[3] A. Noreen, *Vårt språk*, I-IV, V, VII, IX (Lund, 1903-23), I, 97.

[4] E. Haugen, *The Norwegian Language in America*, 2 vols. (Philadelphia, Pa., 1953).

[5] Like Haugen I count as the first generation—as far as the language is concerned—those immigrants who were 15 years old or older when they immigrated. The second generation I count as those who were born in America and those who were 14 years old at the most on their arrival in America. The third generation are the children of the second generation.

[6] For the comprehensive literature about Pennsylvania German see O. Springer, "The Study of the Pennsylvania German Dialect," *JEGP*, XLII (1943), 1-39 and Carroll E. Reed, "Double Dialect Geography," *Orbis*, X (1961), 308-19.

[7] W. G. Johnson, "American Loanwords in American Swedish," *Illinois Studies in Language and Literature*, XXIX (Urbana, Ill., 1942), 80.

[8] K.-H. Dahlstedt, "Isländsk dialektgeografi," *Scripta Islandica*, IX (Uppsala, 1958), 24-7.

[9] R. Broberg, "Den nuvarande språksituationen i Värmlands finnbygder," *Svenska Landsmål* (1953-54), 78-91. (With summary in French.)

[10] For "language aptitude" see E. Haugen, "Bilingualism in the Americas," *Publications of the American Dialect Society*, XXVI (1956), 71-2.

[11] Leo Pap, *Portuguese-American Speech* (New York, 1949), p. 59; Haugen (1953), II, 439-58.

[12] N. E. Hansegård, "Recent Finnish Loanwords in Jukkasjärvi Lappish," *Studia Uralica et Altaica Upsaliensia*, III (Uppsala, 1967), 115.

[13] U. Weinreich, "Languages in Contact," *Publications of the Linguistic Circle of New York*, 1 (1953), 87.

[14] Nils Hasselmo, "Language in Exile," *The Swedish Immigrant Community in Transition*, Essays in Honor of Dr Conrad Bergendoff, ed. J. I. Dowie and E. M. Espelie (Rock Island, Ill., 1963).

METHODOLOGY OF AN URBAN SPEECH SURVEY

By CHARLES L. HOUCK

INTRODUCTION

In recent years, linguists have begun to investigate urban linguistic behaviour as a function of socio-economic classes rather than as a function of geography, as a deviation from a particular linguistic norm, or as an activity of minority groups. Methods of investigation that worked hitherto, especially the informant selection process, become inadequate when an entire urban community is to be surveyed.[1] Urban areas are, first of all, dynamic rather than static; and secondly, they have an extremely complex socio-economic class structure that does not usually yield to subjective classification. The method used in surveying urban linguistic behaviour must, therefore, not only take into account these two above characteristics, but must do so in a manner that is objective and that allows for the calculation of sampling errors mathematically through various statistical formulae. The purpose of the present paper is to describe such a method as it was used in a survey of the linguistic behaviour of Leeds as a function of socio-economic classes.

METHOD

The two-stage probability sample. A two-stage probability sample was used to obtain informants for this survey.[2] The first stage involved the construction of a valid stratum from which to select a random sample of households. The second stage involved the random selection of households from which the informants would ultimately be randomly selected.

Using the city boundaries of Leeds as the outer limits and the national grid co-ordinates as formulated by the Ordnance Survey topographic maps, the city was divided into quarter-kilometer squares. Each square therefore represented a quarter section of a 25 inch to a mile scale map (1:2500), or a complete 50 inch to a mile scale map (1:1250). A land use map of the city of Leeds, created from information provided by the City Engineer's Department was then used. This map provided a complete areal cover of the residential housing in the city. All those squares which contained 50% or more of their area in residential use were marked. The total number of squares in residential use was 236. Therefore, it was decided that for the survey to be manageable only half of these 236 residential squares would be selected. To insure, however, that the areal cover of the sample was such that it included a representative selection of housing densities, types of housing, and consequently, a cross-section of the social structure of the city, 5 concentric rings a mile wide were marked out on a quarter-kilometer square grid, beginning from the city centre and ending at the city limits; then every alternate residential square in each mile-out concentric ring was systematically selected, giving precisely the correct proportional number of squares per concentric ring (see Map, p. 117). The count was, 4, 26, 35, and 11 for rings 1 to 5 respectively, totalling 118. Three more squares were dropped when later on-the-scene investigation showed that these 3 squares had undergone extensive slum clearance since the Ordnance Survey maps were produced (i.e. during the last five years) and were not now residential.

The process used to select randomly the households from each square involved again the use of the 25 inch (1:2500) Ordnance Survey maps. Beginning with the 25 inch map (1:2500), each chosen square was identified by co-ordinates and an overlay was made of it which displayed the systematic count of houses and the geographical location of the selected household contained in the square. Sometimes, however, the 25 inch map (1:2500) was incomplete in terms of addresses or just out of date for certain areas of Leeds. One then had to use the 50 inch (1:1250) map to obtain this information. In areas where both map sizes were judged to be not up to date by personal inspection of the area or by information obtained from the City Engineer, up-to-date field-map overlays were made and the houses were counted and addresses listed.[3] Although Miss Leigh made a proportional selection of households, the time factor in this study allowed only one household from each quarter-kilometer square to be randomly selected from the systematically numbered houses and its address noted.[4] If the selected house was discovered to be unoccupied, demolished, or non-residential, the quarter-kilometer square was resampled. The resampling was done on the assumption that it met the original criteria that every resident had an equal chance of being included in the sample and that his selection was independent of informant selection in other quarter-kilometer squares.[5]

Informant qualifications. In order to qualify as an informant, the members of the household had to meet the following conditions: (1) they had to be a non-transit member of the household; (2) they

THE UNIVERSITY OF LEEDS

Leeds 2
Telephone 31751

SCHOOL OF ENGLISH

Dear Householder,

I am writing to ask for your help for a University investigation into the make-up of the speech of the City of Leeds.

Professor Charles Houck an American Fulbright Scholar has prepared, on a strictly scientific basis, a list of households to be visited with a short set of questions. These questions do not ask for information, but are designed to collect the pronunciation of a list of selected words. These words are to be sought in over a hundred households throughout the city and your home has come out of the selection process in rather the same manner that ERNIE, the selcting machine, chooses Premium Bond winners. In the same way Professor Houck has to choose at random one person in your household when he calls. Your name is not important to the inquiry, butit would help if you would tell Professor Houck, as well as the words, a little about your own background, which will help him index the material. The whole inquiry is designed to take a little over half an hour of your time. Professor Houck needs to record your answers on a specially designed tape recorder that only takes the one word of your reply, and not the questions. He will be quite prepared to play back the answers, a process which takes only about five minutes.

I do not ask you to stay at home specially to wait for Professor Houck, he will try to call when someone is at home, and will then be most ready if necessary to arrange a later visit timed to suit your own arrangements.

I should stress that this is not an attempt to collect "Leeds speech", but is an inquiry into what various factors have an effect upon local speech at the present time, it will include people who come from all kinds of backgrounds and communities.

Yours faithfully,

Stanley Ellis

Lecturer in English Language

had to be 15 years of age or older (the official school-leaving age for England); (3) they had to be a functional speaker of English; and (4) they had to be mentally and physically capable of giving the information needed. The members of the household who met all of these conditions were then systematically numbered and one was randomly selected.[6]

Letters of introduction. Three different letters were used to introduce me and to explain the purpose of the survey (see p. 118).[7] The different letters were made necessary by (1) the need to call again at the household which had been visited on several previous occasions without finding anyone at home, and which had to be put aside for a lengthy period of time. In this case the letter simply told the householder that he had been called on, but was not found in and would be called on again shortly; and (2) the need to call again on a household which had refused admittance because the householder had not received the first introductory letter, and consequently was suspicious or dubious about the authenticity of the survey. The envelopes were addressed to "The Head of the House," and were franked and posted by the University of Leeds, signifying official university business.

The questionnaire. The questionnaire (see pp. 120-3) was designed to elicit vowel and consonant monosyllabic minimal word-pairs that would provide a phonological inventory which could ultimately be analysed on the Kay Sonograph and a computer. Eleven vowel monophthongs and 8 diphthongs were substituted medially before both voiceless and voiced alveolar stops.[8] Twenty-six consonants were substituted primarily in initial position. The exceptions were the voiceless and voiced interdental fricatives [θ, ð], the velar nasal [ŋ], the voiced alveopalatal fricative [ʒ], and the alveolar lateral [l], which were substituted only or also in final, intervocalic, or postvocalic final position respectively.

As can be easily seen in the minimal-pair chart (see p. 124), all the words are not true minimal pairs or monosyllabic. Although Roman Jakobson[9] and Gimson,[10] as well as others, provide admirable commutation lists which demonstrate concisely the phenomenon of minimal distinctions, they are usually made up of words which do not have wide currency. In this study, as is the case in other studies of this type, words had to be picked that not only would most likely be obtained from an informant regardless of his socio-economic background, but would also meet the criteria of acoustical minimalness and monosyllabism.[11]

Questionnaire for Eliciting Minimal-Pairs for Phonological Analysis.

1. Some plastic flowers look almost [real].
2. Household plants grow best indoors on a large and sunny window[sill].
3. The rich and the [poor].
4. In the house you'd grow flowers like geraniums in a flower [pot].
5. A short name (show card with Herbert on it) for the name on the card is [Bert].
6. At the zoo you might feed fish to the [seals]. And one (hold up one finger) is called a [seal].
7. If someone disagreed with your order, you might say that there will be no ifs or [buts]. And one is called a [but].
8. After the referee made an unpopular football decision against the home team, the crowd [booed]. (make gesture of booing).
9. You'd wash your good woollens not in a washing machine, but in the [sink].
10. (an old saying) A man is earnest and full of [zeal].
11. A town like Bradford making woollen cloth would have lots of [mills]. And one is called a [mill].

12 An enclosed delivery vehicle usually without any windows is called a [van].

13. A. A carpenter's tool for drilling holes in wood is called a brace and [bit].
    B. Today, a dog bites; Yesterday, he [bit].
14. If you were cold and shivery, you might say, I got a [chill].
15. If something broke on anything mechanical, you'd to to the shop for a new [part].

16. A fisherman goes out in a [boat].

17. To keep shoes on, the laces are [tied].

18. A short name for Lilian is [Lil'].

19. If you were hunting a dangerous wounded animal, you might say to your guide who told you to stay back, "No, I want to be in at the [kill]."

20. There's a saying they're as like as two peas in a [pod]

21. Sometimes a fisherman uses live worms as [bait].

22. This whole thing sitting on top of my neck is called the [head].

23. If something is not good, it is [bad].

24. If you went fishing at Blackpool, you'd fish off a long [pier].

25. When a man purposely doesn't shave, you'd say he is growing a [beard].

26. The envelope (give (E) to informant) is addressed to Mr. [Hoyte].

27. The opposite of no is [yes].

28. Women when they go out may wear a string of [beads]. One is called a [bead]. [the inexpensive kind . . . .]

29 Not to empty, but to [fill].

30. An auctioneer holds up a valuable painting and says, What am I [bid].

31. In order to get the right amount for each ingredient when you are baking, you'd use a [measure]. [two syllable word].

32. If you were very warm, you might cool yourself (gesture of fanning) with a [fan].

33. Jack and [Jill].

34. If someone does wrong in a religious sense, you'd say he has committed a [sin].

35. After tea or supper you'd tell the small children it's time for [bed].

36. A shopkeeper would get change from his [till].

37. This part of the face (gesture) is called the [chin].

38. This front part of the leg (gesture) is called the [shin]. [It hurts when I kick you on the (shin)].

39. A right and a left shoe make a [pair].

40. If a ship is tied up to a dock, you'd say it is [moored].

41. The windows of a jail are usually [barred].

42. [Advert of TV] Budgies bounce with health with [Trill].
[try it with Trill box].

43. If someone makes a nicely said point, you'd say to him that it was nicely [put].

44. If you took a newly purchased object home, you'd probably say to your (wife husband, parents etc.) Look what I've just [bought].

45. When a policeman has a special area to patrol, you'd talk about walking his [beat].

46. This envelope is addressed to Mr. [Boyd]. [as in 26].

47. A fish breathes with its [gills]. And one is called a [gill].

48. For making a hole in a tooth, a dentist would use a [drill].

49. A man playing the piano in a pub would probably get the men to [sing].

50. At a memorial service, you'd stand with your head [bowed].

51. Football score: Leeds United 5, Manchester United [nil]. [If I were a sports announcer on TV or on the radio (wireless) . . . .]

52. I'd rather have medicine because I can't swallow a [pill].

53. A match between two fighters is called a [bout]. [A ten round (bout)].

54. At the bookmakers, you can place a [bet].

55. The fourth letter of the alphabet is [D].

56. Before a flower has a blossom, it will have a [bud].

57. An angry animal sometimes has his fan [bared]. [Baird TV (show card with name)]. [If I took off my shirt and vest, my chest would be (bared)].

58. If you saw someone with legs bent like this (gesture ( )), you'd say his legs are [bowed].

59. Given the correct amount for a due bill, a shopkeeper would mark your account [paid].

60. If you have a visitor, you'd offer him a cup of [tea].

61. If you had used a lot of electricity this past quarter, you'd get from the Electricity Board, in the post, a large [bill].

62. You'd call a dish made with suet steak and kidney [pud']: [Not with crust, but . . .]

63. If you were baking, you'd roll out your pastry on a [board].

64. A small flying black creature with leathery wings and found sometimes in church belfries is called a [bat].

65. If you were gasping for air you'd say, I can hardly [breathe].

66. Someone about to die would make his [will].

67. If Leeds were winning, you might say Leeds are [ahead]. [Remember that word that sits on top of my neck? Well, as used in this sentence]. [if calling a ship, you call ship (ahoy)].

68, If you had been running hard, you'd probably be short of [breath].

69. I'm wearing shoes; if they came up to my ankles (or gesture,) you'd call them [boots]. And one is called a boot .

70. A little flying creature with feathers is called a [bird].

71. Postmen distrust dogs on their rounds because the dogs sometimes [bite]

Minimal-Pair Chart

Vowel Minimal Pairs

[i]	bead beat			[u]	booed boot
[ ]	bid bit	[ɜ]	bird, Bert	[ ]	pud' put
[ɛ]	bed bet	[ʌ]	bud but	[ɔ]	board bought
[æ]	bad bat	[a]	barred part	[p]	pod, pot
[e]	paid, bait	[ɘ]	beard	[ə]	bowed, boat
[a]	tied tight	[ɛɘ]	baird bared	[a]	bowed, bout
[ɔ]	Boyd Hoyte	[ə]	moored		

Consonant Minimal Pairs

[p]	pill			[t]	till tea			[k]	kill
[b]	bill			[d]	dee "D"			[g]	gill
				[tr]	trill	[tʃ]	chill chin		
				[dr]	drill	[dʒ]	Jill		
[f]	fill fan	[θ]	breath	[s]	sill seal sin	[ʃ]	shin	[h]	head
[v]	van	[ð]	breathe	[z]	zeal	[ʒ]	measure	[h]	ahead
[m]	mill			[n]	nil			[ŋ]	sink sing
[w]	will			[l]	Lil'				
				[r]	real				

Sentence frames were constructed so that the response-word would always be obtained in sentence-final position, under stress, and with a falling intonation contour. The response-word was also placed in a semantic context which it was hoped would maximize the probability of its being obtained; for example, sentence frame 3: the rich and the [poor].

To minimize two types of systematic pronunciation-bias the sentence frames with their response-words were randomly distributed. This random distribution minimized, first of all, the chance of any systematic grouping of words, consciously or unconsciously, which because of their identical or similar phonological make-up would bias the pronunciation of the following phonologically similar word. Secondly, the random distribution, along with the different semantic environments of each sentence frame, in effect gave the questionnaire the form of a cross-word puzzle. It was believed that the cross-word puzzle format would force the informant to focus on giving the appropriate response-word and would minimize the bias resulting from the informant focusing on some particular "correct" pronunciation. In addition, emphasis was placed on giving the appropriate word, not on pronunciation, when explaining the interview procedure to the informant.

The questionnaire was tested with four informants before it was used in the survey, and changes were made. Changes in the questionnaire were also made during the survey if a particular sentence frame did not produce the response effectively, and a similar frame was found to be more successful; for example, sentence frame 24:

1. Most seaside resorts like Blackpool (or Scarborough) have a long (gesture) [pier]. (juts [or sticks] out into the sea).
2. If you went fishing at Blackpool, you'd have to walk out on a long [pier].
3. If you went fishing at Blackpool, you'd fish off a long [pier].

Extended speech. Although it was believed that the cross-word puzzle format of the minimal pair questionnaire would produce isolated approximations to casual speech, it was also believed that there was a need to try Labov's method of getting extended casual speech within the context of the interview.[12] Labov used two topics. One was "a discussion of childhood rhymes and customs," such as:

My mother, your mother lives across the way,
Two-fourteen East Broadway,
Every night they have a fight
And this is what they say . . . (Labov, p. 168).

Informant Data Sheet

CELL NUMBER: ________. SEX: M F MARITAL STATUS: S M W(er)

1. IN WHICH AGE GROUP ARE YOU? (show chart) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15.
2. IN WHAT TOWN AND COUNTRY WERE YOU BORN? V/T/C ________________ CO. ____________
3. WHERE DID YOU LIVE BEFORE YOU WERE 13? V/T/C ____________CO. ______
4. WHERE DID YOU LIVE FROM AGE 13 THROUGH 19? V/T/C/ ________________ CO. __________
5. AFTER THE AGE OF 19 WHERE IN ENGLAND HAVE YOU LIVED MOST OF YOUR LIFE? V/T/C________________CO. __________; V/T/C__________ CO. ______
6. AFTER THE AGE OF 19 HAVE YOU LIVED ANYWHERE ELSE MORE THAN ONE YEAR?

V/T/C	____________	CO.	____________	YEARS?	____________
	____________		____________		____________
	____________		____________		____________

7. HAVE YOU EVER LIVED IN THE COUNTRY OR ON A FARM? N YEARS? -5 -10 -20 +20.
8. WAS YOUR MOTHER BORN AROUND HERE? Y N V/T/C ________CO. ________
9. WAS YOUR FATHER BORN AROUND HERE? Y N V/T/C________CO. ________
10. HOW OLD WERE YOU WHEN YOU LEFT SCHOOL? ____________
11. WHAT YEAR DID YOU LEAVE SCHOOL? __________(1958)
12. WHAT KIND OF SCHOOL (do, did) YOU GO TO? ______________________________
13. If 15/15+ & still in school WILL YOU GET A CSE? Y N. ARE YOU TAKING "O" LEVEL? Y N. ARE YOU TAKING DAY RELEASE? NIGHT CLASSES ? Y N.
14. If 16/18 when leaving school DID YOU GET A (GCE , HNC)? Y N.
15. WHAT IS YOUR breadwinner's (JOB, OCCUPATION)? ____________________
16. (ARE , WERE) YOU PAID WEEKLY OR MONTHLY: W M.
17. (IS, WAS) YOUR WAGE CALCULATED BY PIECE-WORK OR HOURLY RATE? P-W HR.
18. IN WHICH INCOME GROUP ARE YOU? (show chart) 1 2 3 4 5 6.

INCIDENTAL INFORMATION OR COMMENTS:

The second was "the question, 'Have you ever been in a situation where you thought you were in serious danger of being killed, when you thought, "this is it"?' If the answer [was] 'yes' [Labov asked], 'What happened?' " (p. 168).

As Labov pointed out, "There is a psychological pressure to prove that this was a real, not an imagined danger, and the speaker often becomes involved in his narrative to the extent that his attention is entirely focused on this re-enactment of the past" (p. 168).

In the present study another question was used, because during the testing it was found that discussion of childhood rhymes and customs was unfruitful. The question substituted was, "Have you ever been in a situation where something funny or humorous happened to you or you saw it happen to someone else?" This question was particularly effective among the women informants, who seemed to have lived a rather uneventful life in terms of dangerous situations.

Informant data sheet. The informant data sheet (p. 126) is a composite of stated and inferred questions from several sociological informant data questionnaires. The starting-point was the "index" used in Labov's study to determine "the relative socio-economic status of the individuals who were interviewed . . . , which combined three indicators: occupation [of the breadwinner], education [of the informant], and the family income figure" (pp. 165-66). An informant data sheet based on Kinsey was also used to formulate residency questions more precisely.[13] To relate the data sheet to England, however, I used the *Classification of Occupations* 1966, which defines socio-economic groups by considering people's employment status and occupation and which theoretically groups people "whose social, cultural and recreational standards and behaviour are similar."[14] This document helped to formulate the questions relating to education, occupation, and income.

Tape-recorder. All informants' responses were recorded on the Uher 4000L Report portable tape-recorder with a high fidelity microphone at 3·75 ips. with a frequency range of 40 to 16,000 cps. EMI and Scotch standard-play recording tape were used as a result of advice from the BBC.

RESULTS

Since the purpose of the paper is methodological, only some very brief and preliminary results are reported here. Results of a more definitive nature will be published in a later paper.

As shown by the Map (p. 117), 87 out of 115, or 75%, randomly selected informants were interviewed. Preliminary results, based on 20 informants who were randomly selected from the 87, showed that these 20 informants represented with correct percentages the 5 social classes that are based on occupation classification, i.e. professional, intermediate, skilled, partly skilled, and unskilled occupations, as well as many of the 17 socio-economic groups (4 are agricultural and so do not appear at all in the study), and that the vocalic segmental phoneme they used in "bud" seemed to indicate that the linguistic behaviour in Leeds is a function of socio-economic class.

CONCLUSION

It is believed that the method presented in this paper is capable of surveying linguistically the whole population structure of any English urban centre, regardless of size. It is recognized that the method is not definitive, but it is hoped that it will serve as a reliable reference point for future linguistic studies in English urban areas.

NOTES

[1] John T. Wright, "Urban Dialects: A Consideration of Method," *Zeitschrift für Mundartforschung*, XXXIII (1966), 232-47.

[2] The sampling technique used in this survey was developed by Miss Christine Leigh, a lecturer in statistical geography in the Department of Geography, The University of Leeds, for her doctoral dissertation. Through its use, the time that would have been spent on developing an independent random sampling technique, an estimated ten months, could be used to interview informants.

[3] This time-consuming activity was fortunately required in only six squares in the present study.

[4] A pilot study by Miss Leigh in 1963-64 tested the randomness of the selected households. The results showed that her two-stage probability sampling method was highly reliable.

[5] Celeste McCollough and Loche Van Atta, *Statistical Concepts* (New York, 1963), pp. 13-14.

[6] Members of the household eligible to be interviewed were again advised (see Letter, p. 118) that the informant must be chosen randomly; that it could not be a case of "let the Mister do it." It was explained that it would be better not to interview anyone in the household than to violate the principles of random sampling. Fortunately, there was only one instance where an informant thus chosen refused to be interviewed.

[7] The three letters were composed and signed by Mr Stanley Ellis, School of English, The University of Leeds.

[8] A. C. Gimson, *An Introduction to the Pronunciation of English* (London, 1962), pp. 86-87.

[9] Roman Jakobson *et al.*, *Preliminaries to Speech Analysis* (Cambridge, Mass., 1963), pp. 1-2.

[10] *Op. cit.*, pp. 86-87.

[11] Since I was not a speaker of British English, considerable help was needed here and later with the sentence frames (pp. 120-3), and it was fortunately provided by Stanley Ellis, who is a native of Bradford, a city just nine miles west of Leeds, and has long been a resident of Leeds. The list of commutations was also presented semi-formally in a paper to a seminar of linguists at the University of Leeds for criticisms, changes, and suggestions.

[12] Labov tested for casual speech by looking for "one of five channel cues: changes in tempo, pitch, or volume, laughter, or changes in breathing. If at least one of these occurred, it would be judged casual speech" ("Phonological Correlates of Social Stratification," in *The Ethnography of Communication* ed. J. J. Gumperz and D. Hymes, *American Anthropologist Special Publication*, LXVI (1964), p. 168).

[13] John T. Wright, "Taxonomy for Stratified Sampling of Rural-Urban Communities," a mimeographed sheet (School of Oriental and African Studies, 1965).

[14] (London: Her Majesty's Stationery Office, 1966), p. xi.

CONTRIBUTIONS OF BRITISH FOLK SPEECH TO AMERICAN PRONUNCIATION

By HANS KURATH

I

The regional varieties of English spoken by educated Americans have so much in common with Standard British English (SBE) that communication between such speakers of English living on either side of the Atlantic offers little difficulty. American English shares with British English not only the greater part of the vocabulary, but also the system of functional sounds (phonemes) and the structural aspects of morphology and syntax. This can only mean that Standard British English and literary English have been the dominant force in shaping American usage from early colonial days until the Revolution, and that British influence continued well into the nineteenth century.

Nevertheless, the regional differences that we find along the Atlantic nowadays point to the survival of features derived from British dialects or—which comes to the same thing—from regional variants of SBE current, say, in the West or the North of England during the seventeenth century, when the several colonies were established.

That features not traceable to SBE should survive on the North American continent is not surprising.

Coming from all parts of the British Isles, though not in equal numbers, the great majority of the settlers, unschooled and unlettered, spoke the dialects of their home counties. In their old surroundings they had heard a regional variety of the national standard. They understood it, but did not speak it. There was no need of it in dealing with their neighbours, and they had little occasion to transact business with outsiders. In fact, mimicking the speech of their "betters" would have clashed with their social status in the sharply divided and class-conscious society of the seventeenth century.

In their new homes—on Massachusetts Bay, on the Delaware, on Chesapeake Bay, or on the coast of the Carolinas—this unlettered majority was confronted with an utterly different situation. Coming from different sections of the Old Country, one's neighbours spoke a variety of dialects that could hardly serve the purpose of effective communication within the community. Under the circumstances, an adaptation of the standard language of England inevitably became the medium of communication in each of the colonies strung out from New England to South Carolina. In this development, the educated minorities in the several colonies obviously played a major role. Their usage was imitated by speakers of English folk dialects, many of whom had some familiarity with it when they arrived on this side of the Atlantic. It can be safely assumed that within a century—say by 1725 or 1750—each of the major colonies had a distinct regional adaptation of Standard British English, which underlies the several regional dialects of American English of today.

Another factor that favoured the adoption of SBE must not be overlooked. Close ties with England were maintained by many of the leading families in the several colonies at least until the War of Independence—witness the considerable number of royalists who left the colonies that were to become the United States. Cultural as well as commercial connexions, centred in the seaports, facilitated the importation of eighteenth-century innovations in cultivated British speech, notably the loss of postvocalic [r] as such and the consequent addition of a unit to the vowel system—the syllabic phoneme exemplified in *far, hard.*

II

It has been pointed out above, (1) that all varieties of American English have essentially the same phonemic system and the same morphological and syntactic structure, and (2) that these systematic features agree with those of Standard British English. If that is granted, differences between the regional dialects of AE and BE are largely nonstructural. In phonology, shared phonemes could be articulated differently (i.e. differ phonically), or they could appear in different words (i.e. differ in lexical incidence). In morphology, there could be differences in the realization of a shared grammatical category, say of the preterite, as in *ate* ~ *et* or *dived* ~ *dove*

Phonic differences in the realization of shared phonemes are a striking phenomenon in American English. Though most prominent in folk speech, they are widespread in regional cultivated speech.

For the discussion that follows I shall use the scheme of syllabic phonemes that I have presented and discussed in previous publications.[1] According to this scheme, the stressed vowels fall into two categories: checked and free. The checked vowels, as in *bit, bet, bat, hot, hut, foot,* occur only before consonants; on the other hand, the free vowels, as in *bee-beat, bay-bait, buy-bite, boy-boil, do-mood, no-note, law-bought, now-out, fur-burn,* and *car-cart,* can end a word or morpheme or be followed by a consonant.

Of the two categories of stressed syllabics, the free vowels exhibit the widest range of phonic variants in the eastern United States. Thus the phoneme /e/ of *bay, bait* has regional diaphones ranging from upgliding [ɛɩ ~ eɩ] to monophthongal or ingliding [eˑ ~ eᵊ]; the phoneme /o/ of *no, note* is realized as [ɔʊ ~ oʊ ~ oˑ ~ oᵊ], the /u/ of *do, mood* as [ʊu ~ uˑ ~ ʉˑ], the /ɔ/ of *law, bought* as [ɔˑ ~ ɔˑᵊ ~ ɒˑ ~ ɒɔ]. The phoneme /ai/ of *buy, bite* ranges phonically from [aɩ ~ aˑᵋ] to [aˑ] and [ʌɩ ~ əɩ], the /au/ of *now, out* from [aʊ ~ aˑʊ] to [æʉ ~ ɛʉ ~ əʊ]. The syllabic /ɜ/ of *fur, burn* has perhaps the widest range of regional and social diaphones, being articulated with more or less constriction of the body of the tongue, i.e. as [ɝˑ ~ ə̣ˑ], or as an unconstricted mid-central monophthong [ɜˑ ~ ɞˑ] or a diphthong [ɜɩ].

In the checked vowels, phonic differences are less pronounced, but the /æ/ of *bad, ashes* and the /ʌ/ of *sun* exhibit rather marked regional diaphones.

It is important to note that most of the diaphones mentioned above exhibit more or less clear-cut regional (or social) dissemination patterns. They are not random variations, but constitute characteristic aspects of the several regional dialects of American English. If we recognize them as such, as we must, we are faced with the problem of accounting for their origin and their survival.

Let us first consider the rather widely held view that American pronunciation reflects an earlier stage of Standard British English. This view rests primarily upon the notion that colonial dialects are naturally conservative because their contacts with the innovating centre of the standard language are loosened or broken. The archaic character of Icelandic as compared with the Norwegian dialects is usually cited in support of this theory. But is Icelandic typical? Are not the conservative features of American English counterbalanced by American innovation and by conservative features of British English that do not survive on this side of the Atlantic?[2]

We may, then, concede that certain regional diaphones of some shared phonemes could reflect earlier stages in the pronunciation of SBE. But most of the regional diaphones, so securely mapped on the basis of the collections of the Linguistic Atlas of the Eastern States, cannot come from that source. Even a cursory inspection of the variants illustrated above should make that clear.

When we raise the question as to whether some of the American diaphones reflect regional differences in the pronunciation of SBE current during the seventeenth and eighteenth centuries in the British Isles, we must freely grant that possibility. But what is the evidence? Subphonemic variants would not be conveyed by the spelling. Orthoepists might comment on some of them in their obscure ways. Hence little can be learned from these sources. Only a field survey of British folk speech of the present day could throw some light on possible regional diaphones of SBE current during the time when colonies were planted in America.

Fortunately a close phonic recording of the folk dialects of England, Scotland, and Northern Ireland has either been carried out or is now in progress. Moreover, for parts of England some of the findings have already been published by Harold Orton and his associates. Students of American English are eagerly looking forward to the speedy publication of the survey of the Midlands, which apparently has made a major contribution to the phonic character of the syllabic phonemes of AE. For the time being, G. S. Lowman's wide-meshed survey of the South Midland area fills in some of the gaps.[3]

It would be premature to pin-point the British sources of many a regional diaphone of AE at this time. Among other things, we should have at least a tentative analysis of the vowel systems of the major dialectal types. At the present time we are constrained to operate on a purely phonic basis. Nevertheless I shall venture to point out a number of plausible connexions.

It is noteworthy that the phonic realization of the several phonemes in Standard British English is always more or less widely current in American English, even if their dialectal basis is rather narrowly circumscribed. On the other hand, diaphones that are characteristic of British folk dialects over large areas are apt to survive in one dialect area or another of the Atlantic states. We shall content ourselves with a few fairly clear examples, relying for England primarily on Lowman's survey (footnote 3) and for America on Kurath and McDavid's *The Pronunciation of English in the Atlantic States* (footnote 1). References in parentheses refer to maps in this publication.

(1) The free vowel /e/ of *lane, apron, day* is articulated as an upgliding diphthong [eɩ ∼ ɛɩ] in SBE, which has its basis in the folk speech of the eastern counties of England. This diaphone of /e/ is current with varying frequency in most parts of the eastern United States (Maps 18 and 19). An ingliding diphthong [eə] in checked position is characteristic of the speech of coastal South Carolina, one of the old focal areas. This regional diaphone of /e/ has its counterpart in the folk speech of the west of England and of the counties adjoining the Wash (Norfolk, Cambridge, Lincoln), its obvious source. The South Carolinian [eə] has the monophthongal allophone [eˑ] in free position, which may well come from the imported [eə]. Monophthongal [eˑ] scattered along Chesapeake Bay and in eastern North Carolina is probably derived from the same British source.

(2) The American diaphones of the free vowel /o/ of *stone, coat, clothes* clearly have an analogous history. The upgliding [oʊ ~ ɔʊ ~ ɞu] of SBE and the folk dialects of parts of eastern England are widely current in the Atlantic states (Maps 20 and 21). Ingliding [oə], varying positionally with monophthongal [o·], characterize the low-country of South Carolina; and the monophthongal diaphone [o·] survives to some extent in eastern Virginia and North Carolina. The British background is unmistakable: ingliding [oə ~ uə] are the regular reflexes of ME /ǭ/ in the folk speech of the western counties and of Norfolk and Suffolk.

(3) In SBE the syllabic /au/ of *now, out* is articulated as [aʊ ~ ɑʊ], and this sound has extensive currency in America, especially from Pennsylvania northward (Maps 28 and 29). In the southern states the diaphone [æʉ] predominates on all social levels, unless a voiceless consonant follows. This phonic type is widely current in the folk speech of eastern England (including the London area) and presumably underlies southern usage. A third diaphone, [əu ~ ʌu], regularly appears before voiceless consonants in Virginia and in coastal South Carolina. It has its counterpart in the dialects of western England and East Anglia. In New England the diaphones [æʉ] and [əu ~ ʌu] survive only in old-fashioned speech. They do not occur in positional distribution, which may be an American innovation of Virginia and South Carolina speech.

(4) The diaphones of the syllabic /ai/ of *buy, bite* exhibit regional dissemination patterns similar to those of /au/ (Maps 26 and 27). The diaphones [aɩ ~ ɑɩ], corresponding to SBE usage, predominate from Pennsylvania northward. South of Pennsylvania, "slow" rising diphthongs [a·$^{\varepsilon}$ ~ ɑ·$^{\varepsilon}$] or ingliding [a·^{ə} ~ ɑ·^{ə}] are widely current, but their British background is yet to be determined. The diaphone [əi ~ ɐi] is regularly used before voiceless consonants in Virginia and coastal South Carolina, but appears in old-fashioned New England speech without positional restriction. Since this phonic type is characteristic of East Anglian and western folk speech, its British background is hardly subject to doubt.

In this brief paper my chief purpose has been to illustrate by a number of examples that subphonemic regional features of American pronunciation are in part traceable to British regional folk speech of the seventeenth and early eighteenth centuries. To the historian of American English this is an important problem. His hope is that the current surveys of the folk dialects of the British Isles will provide him with evidence which will enable him to reach back into the past in his attempt to unravel some of the strands that link American English with the several types of British English brought to the American continent.

NOTES

[1] H. Kurath and R. I. McDavid, Jr., *The Pronunciation of English in the Atlantic States* (Ann Arbor, 1961), pp. 3-8.
H. Kurath, *A Phonology and Prosody of Modern English* (Heidelberg and Ann Arbor, 1964), pp. 17-20.
H. Kurath, "British Sources of Selected Features of American Pronunciation: Problems and Methods," *In Honour of Daniel Jones,* ed. D. B. Fry and others (London, 1964), pp. 146-55.

[2] A. Baugh, *A History of the English Language,* 2nd ed., rev. (London, 1959), pp. 416 ff., offers a judicious consideration of this subject.

[3] Lowman's field records are part of the collections of the Linguistic Atlas, now in the charge of R. I. McDavid, Jr. at the University of Chicago. Made in 1937-38, they represent all the counties of England south of a line running from Lincolnshire to Worcestershire. Lowman received his intensive phonetic training under the direction of Daniel Jones at University College, London.

DIALECTOLOGY AND THE ELECTRONIC DRUDGE

By F. G. CASSIDY

Far as the idea of machinery may be from the thoughts of most students of dialect—much as our first reaction may be *against* getting involved with the highly technical subject of electronics—it is probably wise not to reject anything out of hand. Dialect study in any form requires a high degree of detailed, exacting work which one has to undergo not for its own sake but because it has hitherto been largely unavoidable. If computers can really reduce this burden without imposing, in revenge, some other subtle form of discomfort—if they can do within a reasonable time tasks which we have boggled at undertaking at all because of the cost in years—perhaps we would do well to hear what can be said for and against their use.[1]

The first thing to be said is that the journalistic approach to the computer is thoroughly misleading. If there is any "mystery" or "miracle" in it, that is only so for those who avoid learning about it. After all, it is a human invention: a high-grade machine, but no more than a machine. Without human intelligence it would not exist; without human intelligence it cannot be made to work. It has no mind of its own: even when it seems captious or recalcitrant, this is due to mechanical failure or to human mistakes in the programming or handling. It is natural for us to think anthropomorphically, to call the computer a "brain" or a "drudge," to imagine "gremlins" or "bugs" louting about inside it and tampering with the works. A certain folklore has already sprung up around it—the computer of the cartoons, which makes manlike mistakes, plays shrewd tricks, flashes lights, whirs secretly, and is probably planning something diabolical. No one has seen or painted this better than Artzybasheff. Some genuine fear seems to exist, no doubt inspired by the science-fictioneers, that the computer will displace humanity and "take the world over." All very exciting—it raises for our day the half-pleasurable *frisson* that the twenties felt over Capek's robots, or that *Erewhon* roused a century ago. It might be good, just now, to medicine ourselves with Swift's astringent scepticism by reading the Academy of Lagado.[2]

What is the computer really good for that scholars can use? Its highest virtue is speed, speed that we find it hard to conceive of. Human time is measured in years, hours, at best seconds; computer time is measured in micro-seconds—millionths of a second, and even nano-seconds—billionths of a second. While we are scratching our heads, the computer can search through a hundred thousand items and find the ones we want. Though the job it performs is utterly mechanical,[3] it does it at a speed so prodigious that the investment of human time to use it is more than made up. The more routine the job, the more of the same kind of thing there is to be done, the more human time the computer can save—and this may mean years of our irreplaceable lives. Mental arithmetic, the abacus, the calculating machine: the computer lifts all such operations to a new level through its superior speed; and as to dealing with alphabetic rather than numerical problems, it has no mechanical competitor.

One must add that though the computer is liable to "fatigue" (another anthropomorphic term, often applied to metals and other inanimata) it is less likely to make mistakes from this cause than are human beings. Probably this is because it is harder to shut off the human brain from interfering factors. The things the computer is asked to do at any one time, even when quite complex, are strictly limited. It can do those things only, because they are all it is programmed for, and short of breakdown it cannot escape its programme. The human brain has many potential programmes stored within it which frequently interfere with each other. Probably no human brain is ever programmed completely, either, to do just one set of operations. (Only a well organized human brain can work out a good computer programme.) The brain and the computer are both subject to the effects of temperature, humidity, vibration, physical shock, and so on, but the flesh is heir to many other ills that the computer knows not of. The rare "great thinkers" are people who have disciplined themselves to shut off all kinds of interfering factors which need never bother the computer; we say such men have "great powers of concentration." It has been a preoccupation of certain religions to find ways of releasing thought from bodily influences. The psychedelic[4] or "mind-revealing" drugs, though taken most often by sensationalists, are seriously experimented with by some scientists in this very hope of freeing our "mental" powers from the trammels of the body.[5] The computer is pure mechanism; if we are too, we are more complex and less pure by far. The stuff that we are made on, our "nervous systems," pays for higher sensitivity by a loss in reliability when the level of complexity is raised or when more speed is demanded. Fatigue affects us sooner. We can do anything a computer can do if given time enough. It can do the more mechanical activities much faster than we can with less danger of error—but only at our volition and through our thinking.

Next to speed, and as a by-product of it, the computer can outdo human beings at manipulating masses of material. A conventional file of cards or slips in drawers in cabinets, as soon as one begins to compare or combine, requires much time-consuming footwork and fingerwork. The slips have to be gathered (and returned to the proper places afterwards), they have to be spread out on tables or sorted into piles. It is all too easy to mislay something. Instances have to be counted up, percentages and statistics, if one goes that far, must be laboriously worked out. In the end one accepts limitations simply because the possible gain from further labour seems hardly worth the candle.

This is the point at which a computer programme can lift the entire operation to a new level. If every item that one might want to recover is properly labelled or delimited when put into the file, any kind of sorting, compilation, combination, or comparison becomes easy. The computer adds nothing to the data, but it will present the data in whole or in part as one desires, making it possible to dig out unexpected correlations from below the obvious surface. The very fact that it is easy to compare invites comparisons which one might never attempt otherwise. Once all the mathematically possible comparisons have been made and examined—an exhaustive study of the data—one can feel that, short of the discovery of new evidence, there is nothing more to be done fruitfully with the subject; it may be laid aside, clearing the way for other investigations.

Dialect study concerns itself either with a closed corpus, if the subject is a problem in the past, or an open corpus if it concerns living language. With the former we have traditionally studied texts one by one, made generalizations on the basis of the most striking features, then returned to correct the details when possible with new evidence or sharper interpretations. In early volumes of the EETS the information about dialect, when any was given at all, was necessarily less than satisfactory. But that was over a century ago. The amount and extent of dialect material given today in newly edited texts is highly variable though on the whole somewhat better. A great step forward was taken in preparation for the *Middle English Dictionary* by generalizing from a series of pretty well localized texts and setting down the major isoglossal lines.[6] These have been corrected in detail since, and Professor McIntosh and his helpers promise to refine on the method, to examine almost double the number of documents and take fuller account of the graphemic basis for phonological analyses.[7] McIntosh's concept of the "fit technique" is interesting and becomes possible to apply as one gets into the narrower aspects of what is, essentially, dialect geography practised on texts rather than on living speech. Indeed, beyond the study of individual texts progress can best be made by putting more and more texts together. With computer aid one can carry this process to its conclusion: a larger, even a total, corpus can be examined, and examined in the highest possible degree of detail.

The corpus of ME, though closed, is probably too huge to consider tackling as a whole at present, but in the field of OE we have a corpus of exhaustible size. All or almost all that survives from that period is known and could be put together into a single file for total examination. Indeed, the concording of the OE poetic corpus is nearing completion,[8] and work on the prose has begun.[9] It should be noted that accurate editions must still be made, and must be available for reference and consultation, if a concordance is to be of any value—and this requires the work of scholars before the computer begins its part. Further, since whatever one may want a computer to do must be written into the programme, everything must be foreseen. The programmer must therefore himself either know the subject (in this case OE) or work closely with one who does and who can set forth these desiderata.

Within the complete corpus of surviving OE what data might we find it valuable to examine? What have we never or only partially examined before? Scanners at present in operation can read on to electronic tapes material typed in "alphanumeric" characters—a special fount which to the eye appears slightly peculiar but is quite as easily read as any other. If the OE corpus were typed out so and scanned, with the right kind of programming one could retrieve it part by part at will or in various combinations of the parts.[10] One could ask for example to have every character printed out by itself or in context and to have a count made—how many *a*'s, *b*'s, *c*'s, and so on, in what context each appears, and with what frequency. One could then ask to have comparisons made of, say, the use of *c* vs. *k*, *þ* vs. *ð*, of *a* vs. *æ* vs. *ea*. In the end one would have a definitive account of the graphics of any single text, or of the entire corpus, be able to establish the graphemes, the phonemes, correlate these and features of morphology, lexicon, etc. with the geographic source of the data, and so establish dialect distinctions. Correlation with the type of text (ecclesiastical, literary, translated, original, standardized, personal, etc.) would shed further light on stylistic questions. At the very least, one would have at last a full description of OE—as full a one as the surviving corpus permits—which would facilitate comparison with other stages of English or with other languages, and would permit a definitive job of dictionary-making.

For both the linguist and the literary man it would be valuable to have a frequency-count of the letters of OE, a graphotaxis and letter-group count, a phoneme count, a count of consonant-vowel sequences ("canonical forms") within words, a word-count, a count of recurrent word-groups of any kind (some of which would be casual, others syntactic, others formulaic, and so on). With the dictionary one might give exhaustive lists of prefixes and suffixes (inflexional and word-forming). Compounding could be examined in connexion with spacing; accentuation and other prosodic features could be more fully correlated. Emendations accepted and rejected in the past could be reassessed in the light of probabilities now better known. It would obviously be valuable to put together *all* existing evidence on, say, the palatalization of *g* as indicated by *gi, ge, gie* spellings—especially if this could be presented in something like chronological order and with due regard to the various kinds of sources. Once the data are stored it makes no difference to the computer how we want them manipulated and presented. But this must all be anticipated and made a part of the programme.

The four OE dialect areas traditionally recognized are set apart by depending heavily on the few texts which can be best localized in time and place by non-linguistic evidence, then extrapolating from these to the less certain. By computer methods these basic texts could not only be re-examined, comparing their chief features and perhaps revising past conclusions about them, but the less obviously characteristic features could be scrutinized and probably found to furnish additional evidence. How far the computer can carry us towards greater certainty in these matters cannot be safely predicted, but it is reasonable to suppose that the kind of exhaustive examination which it makes possible would squeeze out a few drops of evidence and (changing the metaphor) somewhat thin out the accumulated underbrush of theories and inconclusive interpretations.

The OE dialects, no less than the ME, could be approached by the methods of linguistic geography. Computers, using a "plotter", are at present able to make maps, to set out on paper all the data one wants displayed. They can not only draw the map itself but assign symbols to the various relevant items as programmed and print this "legend" on the map. Thus a complete set of maps can be drawn of any area for which the data are at hand. Possibly even better than that: using a "scope," computers can present the same maps on a television-like screen, superimpose maps for features one wants to compare and between which one may suspect that some relationship exists, expand the scale of some section of the map for better observation of details, and perhaps delete the commonest feature so that the less common may stand out more clearly. The same data that are used to compose a picture map on the scope can be drawn out on paper in lasting form: using the scope to sort through the possible maps, one might then choose the most significant for the plotter to produce, or simply photograph the scope, as is quite commonly done. Let me repeat that the computer makes no interpretations and draws no conclusions all by itself. The scholar who knows what conclusions may be latent in the data must anticipate and provide for every kind of "output."

The kind of computer methods I have been describing are now in use. For large jobs of data-processing they have already rendered the punch-card and punch tape archaic. Paper tape is especially difficult to correct—cards less so, since a new card can be punched and substituted for the old. But scanner type includes a deletion symbol which will blot out any other character; or, it may be provided that a horizontal line drawn through the type will tell the scanner to ignore it. Thus nothing has to be rubbed out or repunched and substituted—one deletes and goes straight on: the scanner simply skips over the delenda. (Insertions are more difficult to make.)

The scope, too, has a deletion device which is even better, since it can be programmed to remove unwanted letters from the screen at the viewer's command, leaving the remainder clean. For the process of editing—deleting, correcting, adding—the scope should be especially valuable. Data stored on tapes by the scanner may be called on to the screen; the editor reads these and decides which to retain. The rest he dismisses (though they are not lost; if he has an afterthought, any part may be recalled immediately). What he wants to add further is then typed on the keyboard, appears on the screen, and may be placed where he wishes. Thus he may compose his treatment and see it in corrected form. He then pushes a button, and this final output is sent to another tape. From this it may be retrieved and printed out as desired.

At present one is forced to use scanner type to store the file with data, and printouts are all in capitals. But the time is very close when scanners will be able to read conventional type, no longer requiring clearly printed input to be retyped and proof-read. Some typewriters can be coupled to a computer to print out programmes, but this process is less rapid than the usual printout process. Further, printouts are now available (at a price) in upper and lower case characters. This will make for more conventional and readable outputs, even without going from the printout machine to linotype. In working with OE, obviously, certain extra letters and abbreviation symbols have to be provided for, at least in the final stage; though for earlier stages existing punctuation symbols and others not present in OE (Z, V, Q, %, =, etc.) may be substituted, to be translated ultimately into the proper OE symbols. In working with ME texts, or in using a phonetic alphabet with MnE data, the same device of substitution and translation may be applied—has indeed already been applied.[11]

In broad-scaled investigations of living language, notably the dialect atlases, the computer can be a new ally. It will not do the planning or the field work; the data still have to be collected painstakingly by direct interview of speakers. Some mechanical aids are possible here—the tape-recorder, especially. And if the acoustical engineers succeed in producing the sound-translator, it may ultimately be possible to convert a tape record (or, for that matter, the informant's voice directly) into some visual form—even, conceivably, a conventional phonetic transcription, though this is not ideal, since it segments before the eye something which is not segmented to the ear. The visual form, whatever becomes possible, will make human analysis feasible by converting time to linear extension, so that we can analyze slowly what is said much faster.

When such new aids become available, the computer can be programmed to measure the linear record and analyze it in whatever way the analyst desires. It is conceivable that, ultimately, anyone's words spoken into a machine could be immediately scrutinized and classified, much like a fingerprint—an individual vocal signature. And not merely the voice but, beyond that, language itself. Methods of discourse analysis now being worked out by generative-transformational grammarians are eminently fitted for computer processing. Human language, indeed, is so multiplex in its interlocking systems and subsystems that only the tremendously high speed-powers and mass-handling-powers of the computer can ever be expected to give a full picture of even one idiolect.

This glimpse may not be of a remote future. Much of what I have described is possible at present. The linguistic surveys and atlases now in progress within the English-speaking world (and elsewhere too, of course) have come just before or at the time of change—the transition to the computer age. The maps of the *Linguistic Atlas of New England,*[12] all laboriously lettered by hand, make a fine display, but one not likely to be repeated. Today, with scope and plotter presenting the same data stored in a computer file, the entire process could be done mechanically. Furthermore, correlations between the language of the informants and their ages, degrees of education, occupations, and other relevant non-linguistic facts, all of which were carefully collected and are presented in the *Handbook* but do not appear on the maps, could be put there—or, better still, could be tabulated or summarized in some relevant arrangement. At present these data are half raw; interpretations of them—the "results" for which they were presumably gathered—have to be worked out in the old laborious way by the scholar, pencil in hand, counting instances and working out sums and percentages—unless he is so advanced as to use a calculating machine.

The admirably detailed and plentiful collections of Professor Orton's *Survey of English Dialects,* presented in careful lists, has cost countless hours of human labour that we could now relegate to the electronic drudge. Everyone of the phonetic features, including segmental characters, length marks, superscript and subscript diacritics, and conventional alphabetic and numeric abbreviations, once stored in a computer file exactly as they appear in the printed volumes, could be sorted and sifted in any desired way and presented on maps or in tabulations. The presence in any part of the area, or all of it, of any single feature—phonetic, morphologic, syntactic, lexical—could be documented in a very short time for the scholar. Summaries and correlations of various kinds similarly. In short, all the preparation has been done except the putting into computer form. If this last step could be taken, the data would yield their latent riches all the sooner, more fully, and without further drain on scholars' lives.[13]

If I may be permitted a short flight of imagination, I picture an accomplished Scribe in Westminster in 1476. He hears of a dubious sort of fellow, one Caxton, who has been consorting in the Low Countries with these Dutch mechanicks—a harlotry lot who are always stirring up some diabolical brew. Now he has brought a new engine and set it up hard by, with boxes of carved letters, huge screws and plates, pots of foul ink—and is blotting away with it in the pretence of imprinting books. Any right-minded man must watch him askance—give him rope enough to hang himself. At least not precipitate oneself into his delusion but follow the old, safe, and honoured track.

Perhaps the parable is plain enough. We who have come up in the old methods of philological scholarship can read *A Grammarian's Funeral* as Browning undoubtedly meant it: straight. Some younger readers cannot believe that it was not meant ironically and try to read it so. The enclitic *de* is still with us and computers will not themselves solve its mysteries. But perhaps I have shown some ways in which—right now—they could save years of labour which is not scholarship, and turn the saved time back to us for labours which are.

NOTES

[1] I know nothing myself about electronics, computer "hardware" (the machines) or "software" (programmes and programming). This non-technical account has been passed as acceptable technically by Dr R. L. Venezky, who was kind enough to read it. Dr Venezky is the author of the computer programme being used by the *Dictionary of American Regional English*. See his article describing this programme: *American Documentation* 19.1 (Jan., 1968), 71-79.

[2] Journalists may be excused better, perhaps, than some university teachers who offer courses on "Artificial Intelligence and Models in Thinking" in departments of Computer Sciences, or who publish articles with titles like "Can Computers Think?"

[3] I am still referring to electronic computers, not to prototypes using gears, relays, etc.

[4] Literally, "soul-revealing" or "-clarifying." The commonly used phrase "mind-expanding" is not an accurate translation.

[5] See, for example, Dr J. C. Lilly's experiments with the "bio-computer" (the human brain) under influence of LSD. Communications Research Institute, Miami, Florida.

[6] Samuel Moore, Sanford B. Meech, Harold Whitehall, "Middle English Dialect Characteristics and Dialect Boundaries: Preliminary Report . . . ," *Ess. and Stud. in English and Comp. Lit. by Members of the English Dept., Univ. of Michigan*, Ann Arbor (U.M. Press, 1935).

[7] See especially Angus McIntosh, "A New Approach to Middle English Dialectology," *English Studies*, XLIV (1963), 1-11, and M. L. Samuels, "Applications of Middle English Dialectology," *ibid.*, 81-94.

[8] J. B. Bessinger, Jr., "A Computer-based Concordance to the Anglo-Saxon Poetic Records," No. L22 in *Computers and the Humanities* I.5 (May, 1967), p. 187, updated *ibid.* II.2 (Nov., 1967), p. 74.

[9] Drs Richard Venezky and Jon Erickson of the Dept. of English, University of Wisconsin, have concorded, at the present writing, nine of the Vercelli homilies. Though done individually, these are programmed for easy conflation. Nearing completion also is a concordance to the Rushworth 1 Matthew. This work will be gradually extended to other works of the OE prose corpus.

[10] At present, lower case, superscripts, and subscripts (accents, italics, etc.) cannot be scanned as such but must be encoded in a linear sequence.

[11] One recent computer-made concordance which deserves notice is Barnett Kottler and Alan M. Markman, *A Concordance to Five Middle English Poems: Cleanness, Saint Erkenwald, Sir Gawain and the Green Knight, Patience, Pearl*, Pittsburgh (Univ. Pitt. Press, 1966).

[12] Ed. Hans Kurath and Bernard Bloch, *Linguistic Atlas of New England*, 3 vols. in 6 parts, Providence (Brown Univ. Press, 1939-43). Also, Hans Kurath *et al.*, *Handbook of the Linguistic Geography of New England*, Providence (Brown U.P., 1939).

[13] Computer processing is expensive, no question. Further, the rapid development of techniques means that a costly investment in computers may no sooner be made than they are succeeded by even more sophisticated and powerful ones. Nevertheless, the per job cost goes down as use goes up, the older machines can be used for less difficult jobs, and competition among manufacturers steadily reduces the cost of "hardware." An up-to-date computing center with a staff competent in processing natural language problems can advise the scholar whether his investigation will profit by computer handling or not, and can estimate the cost.

MODAL *DAREN'T* AND *DURSTN'T* IN DIALECTAL ENGLISH

By W. NELSON FRANCIS

Section 4 of Book IX of Eugen Dieth and Harold Orton's *A Questionnaire for a Linguistic Atlas of England* (Leeds, 1952) is designed to elicit various forms of the modal auxiliaries, including *shall, will, ought, should, must, may,* and *might.* The last two questions are on *dare* in its modal form and in a pro-predicate position. The questions are phrased as follows:

IX.4.17. Your neighbour would like to go and have a drink of beer, but he is so henpecked that he . . . DARE† NOT†.

18. He wanted to go for a drink, but was so henpecked that he . . . DURST† NOT†.

It will be noted that both the auxiliary and the negative in the suggested responses to both questions are marked with the dagger that "denotes that the word has been inserted for its morphological importance" *(Questionnaire,* p. x). Fieldworkers were instructed to obtain answers including these words, even if the first response of the informant was different and considerable pressure, to the point of suggesting the word, was needed to bring out the desired forms. This accounts for the fact that all but 7 of the 311 localities recorded in the *Survey of English Dialects* (henceforth referred to as *SED*) produced answers of the desired form to question 17, and all but 22 to question 18. Since not all the records are yet available in print, I am not sure how much pressure was necessary to produce these results, but none of the 150 responses from the 75 localities whose records are published in Volume I of *SED*[1] shows pressure or suggestion, and only two out of 24 of my own Norfolk records do. In view of the peripheral status of *dare* in the English modal system, the above results are rather surpising. They indicate that this usage is far more prevalent in dialectal than in standard English.

Before going on to look at the many different forms of this auxiliary and their complex distributions, let us first review its history and present status. Like most of the present-day modals, *dare* belonged to the class of preterite-present verbs in Old English: verbs which in Germanic came to use an original strong preterite as a present, and formed a new preterite with a dental suffix, after the manner of the weak verbs. Thus in West Saxon the third person singular forms of *dare* were present *dearr* and preterite *dorste.* In Northumbrian there were singular forms in *darr,* in which the original *æ*, instead of breaking, was apparently retracted to *a.*[2] Preterite forms like *durste* are found, which derive their vowel from the present plural *durron.* These would give normal modern forms *dar* (*dare* shows lengthening in Early Modern English) and *dorst* or *durst.* Like the other modal auxiliaries, *dare* takes the reduced (enclitic) form of the negative particle, which then gives [dɛːənt, dɛɹənt] as the standard form of the answer to IX.4.17, and [dəːsənt, dəɹsənt] to IX.4.18. The *OED* cites these as "still in common use" and actually preferred in the North to the new analogic forms *dares, dared,* especially when followed by the infinitive without *to.*

Dare has several times been classified above as a modal auxiliary. The distinguishing criteria for this small closed set of verbal auxiliaries may be stated as:

1. Absence of concord-marking suffix on the third person singular form of the present, e.g. *he can, will, shall, may, must, dare.*
2. Occurrence with the enclitic form of the negative particle *not,* e.g. *he can't, won't, shan't, mustn't, daren't* (*mayn't* for some speakers).
3. Inversion with the subject nominal, e.g. *can he?* etc.
4. Occurrence with the following main verb in base form without the infinitive marker *to,* e.g. *he can come,* etc.

What might be called the "hard core" modals regularly show all these features; they are *will/would, shall/should, can/could, may/might, must.* The other three auxiliaries usually considered to belong to the class evince some irregularities. Thus *ought* most commonly takes *to* with the infinitive, and popular speech, in America at least, is coming to prefer *didn't ought* or even *hadn't ought* to *oughtn't,* or else to substitute the synonymous *shouldn't.* Both *need* and *dare* have homonymous counterparts which are transitive verbs, as in *he needs/needed money, he dared the dangerous climb. Dare* can also be intransitive, as in *to dare greatly is the mark of a hero.* These full or lexical verbs partake of none of the characteristics of the modals, as listed above. But when they are in construction with another verb, they show divided usage on all four characteristics:

need he go?	does he need to go?
you needn't bother	you don't need to bother
I don't think he need go	I don't think he needs (to) go
dare he eat a peach?	does he dare (to) eat a peach?
I daren't interrupt him	I don't dare (to) interrupt him
I don't think he dare do it	I don't think he dares (to) do it

The semantic differences between modal and full verb, especially with *dare,* are subtle but obvious. The modal meaning of *dare* has been variously stated as "in the speaker's view the predication has no undesirable consequences";[3] "the event is entirely consistent with status as a proper member of the community: doing the deed involves no jeopardy";[4] "inherent moral ability or justification."[5] The full verb meaning, according to the *OED,* is "to have boldness or courage (*to do* something); to be so bold as." Forms which have some but not all of the modal markers are, for me at least, ambiguous. Thus *I don't think he dare do it* means something like "I consider that the rules of his community are such that if he did it he would suffer social consequences"; while *I don't think he dares to do it* means "I don't consider him brave enough to do it." But *I don't think he dares do it* and *he doesn't dare do it* are ambiguous, though in both cases inclining toward the full verb (or, in Twaddell's term, catenative[6]) meaning. Actually *dare* in the full modal use, except in the set phrase *I dare say,* is quite rare in standard English—probably considerably rarer than it was when the *OED* citations were collected (the latest is 1883).[7] It is not so much that the catenative construction is replacing the modal (as, for example, *have to* is replacing *must*); this, as we have seen, would effect a change of meaning as well as of syntax. Rather, the particular combination of semantic constraints on the predication of the main verb—"adequate stable potentiality" for Joos[8] and "predication not prevented by speaker's view of the environment" for Ehrman[9]—seems to be less in demand. In any case, as with *need* as well, the negative forms are used more than the positive; for this reason it was wise of Dieth and Orton to phrase IX.4.17/18 so as to elicit negative responses.

This brings us to the actual phrasing of the questions and its influence on the responses. In the first place, they are not actually questions, but incomplete sentences to be completed by the informant. This is undoubtedly the best—perhaps the only—way to directly elicit grammatical features of this sort, which are notoriously harder to get than lexical items. Its success depends on conditioning the informant so that he responds immediately without taking thought, and yet stays within the pattern that is expected—in this case by producing some kind of modal or quasi-modal response, rather than some quite natural but grammatically irrelevant extension of the narrative. Since IX.4.17/18 come at the end of a long string of questions of this sort, the informants were well conditioned to the pattern and produced almost no irrelevant responses. The wisdom of putting these, probably the most tricky of the modal auxiliary questions, at the end of the section was well rewarded.

Looking more closely at the questions, we can observe that they call for the modal *dare* in pro-predicate position; that is, the main predication, *go and have a drink of beer,* is introduced in the opening clause of 17 and is thus implied in the last clause. This means that many of the responses fail to inform us about whether or not the informant's usage complies with the fourth criterion for modal auxiliaries given above: i.e. whether or not he would use the infinitive marker *to* with a following verb.[10] Nor can we tell what his practice with regard to inversion with the subject would be. We are thus left with only two of the four criteria of modal status: absence of the concord marker in the present and the enclitic negative. Only the latter applies to the preterite forms in the responses to 18, since there is no concord in the preterite. Fortunately the enclitic negative is one of the most reliable markers of auxiliary, if not always modal, status; only the copula and (decreasingly) the full verb *have* are exceptions to the rule that the enclitic occurs only with auxiliaries.[11] We are thus able to say that *dare* is still a modal, at least in the negative form, for all but five of the 309 informants who answered IX.4.17. Those five, all but one from south of the Thames, produced some variant of either *don't dare* or *doesn't dare.*[12] Usage is somewhat less unanimous in the preterite: in addition to these five, fourteen informants who used the enclitic negative in responding to 17 used a periphrastic form, usually *didn't dare,* in answering 18. Once again the majority, all but two in fact, were from south of the Thames.[13] One informant, from Uffington in Berkshire (3302), had it both ways: his response was *didn't durstn't*!

The next point of interest in examining the form of the questions is the manner in which they are planned to get at tense distinctions. Successful elicitation of a preterite form in 18 depends wholly upon the informant's sensitivity to tense sequence and his perception that *wanted* has been substituted for *would like* and *was* for *is*. These are not the most reliable of cues, since *would like* is itself past-marked formally, if not semantically, and the use of *was* in this sentence is a bit odd—the sentence is at the least on the borderline of the class in which strict tense sequence is not observed (e.g. *my neighbour refused to contribute because he is stingy*). Even with the past-marked *wanted* in the first clause, I would naturally use *is* in the second unless my neighbour no longer was my neighbour, or was dead, widowed, or divorced. The contrast between the two questions would have been more obvious if strong temporal adverbs had been inserted, perhaps *often* in 17 and *last night* in 18. This is especially so since the questions are separated by quite an interval from other questions, notably those in section 3 of Book IX, in which a pattern of transforming the responses for tense is set. In any case, I feel that the tense difference is not sufficiently strongly marked for us to accept unquestioningly that 161 informants, more than half of those recorded, have identical forms for the present and past forms of modal *dare*, as their responses would seem to indicate. There is no doubt, as will be discussed below, that the precarious state of modal *dare* is working to neutralize the tense distinction, but before we can conclude that this is as widespread as appears from the *SED* data, we will need more evidence.

With these cautions about the reliability of the data in mind, we are ready to examine the forms themselves.[14] The first impression one gets is of great variety of form, both phonological and morphological, and exceedingly complex, almost capricious, distribution. In fact, so confusing were the data on first inspection that after a few tentative attempts at structuring them I set them aside in something approaching despair. It was only when the opportunity was afforded to delegate the work of sorting to a computer that I felt able to approach the problem again. From the computer sorting several significant patterns have emerged that otherwise might have been overlooked. Therefore, since the method has had an effect on the results, a brief description of it is relevant here.[15]

It was first necessary to reduce the phonetic variation of the recordings to a quasi-phonemic transcription and code the results for the working alphabet of the computer. This process, while certainly not rigorously phonemic, afforded at least a diaphonic basis for comparing different forms, which is satisfactory for the primarily morphological concern of this study, however inadequate it may be for a more detailed phonological analysis. The following conventions were used:

Vowels:
[ɑ] and [a] = A
[ɛ] and [æ] = E
[ɩ] = I
[ɔ] and [ɒ] = O
[ɷ] = U
[ɜ] = 3
[ə] and [ʌ] = @

Consonants:
[d̥], [t], [ʈ] = T
[ʁ], [ɹ], [ɽ], [r] = R
[ʔ] = ?

Length, whether marked [:] or [·], was coded :

r-colouring of vowels, whether alveolar or uvular (velar), was coded R, but distinguished from consonantal /r/ by position.

Stress, which was marked by some of the fieldworkers, was omitted. The fieldworkers also seem frequently to have neglected to mark syllabic /n/, so this distinction is disregarded.[16]

It was found that all the forms could be fitted into an overall schema of twelve positions or slots, as follows:

1. always D
2. stem vowel, A, E, I, O, U, 3, @
3. vowel length, :
4. *r*-colouring on stem vowel
5. consonantal R or non-syllabic @
6. *r*-colouring on non-syllabic @, or superscript @ on stem vowel
7. length or consonantal R after *r*-coloured non-syllabic @
8. S, Z, or D
9. syllabic @ after S, Z, D
10. always N
11. vowel
12. final T, D, or ?

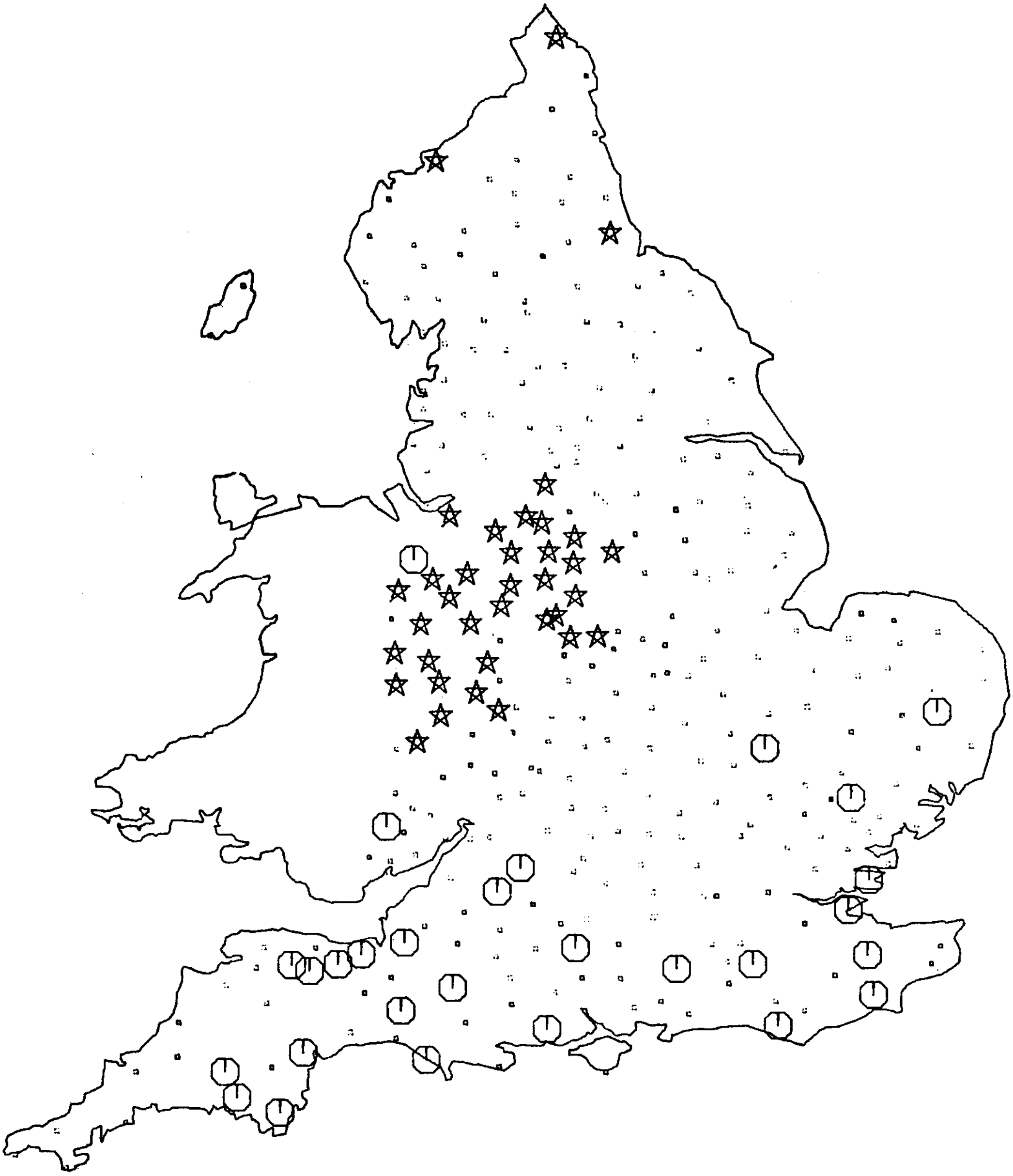
Any slot except 1, 2, and 10 may be blank. It will be noted that R in either slot 4 or slot 6 indicates an *r*-coloured vowel or diphthong, while R in 5 or 7 indicates a consonantal R. Both may, of course, be present. The schema may thus be represented in this fashion (0 means blank):

1	2	3	4	5	6	7	8	9	10	11	12
D	A	:	R	R	R	R	S	@	N	@	T
	E	0	0	@	@	:	Z	0		O	D
	I			0	0	0	D			E	?
	O						0			0	0
	U										
	3										
	@										

All varieties of both present and preterite forms may be transcribed in terms of this schema. A few examples will illustrate the coding. Present forms (responses to question 17) are on the left and preterite forms (question 18) on the right.

0101	[daʁ:nə]	= DA:R N@	[dɔʁ:snt]	= DO:R S N T
0306	[da:dnt]	= DA: D N T	[dɷsnt]	= DU S N T
0503	[dɛədnt]	= DE @ D N T	[daʵ:snt]	= DA:R S N T
0606	[da:ɹənt]	= DA: R @N T	[dɷsnt]	= DU S N T
1107	[dɛ:əʳ:dnə]	= DE: @R: D N@	[dəʳ:dnə]	= D@:R D N@
4004	[dɛəʳɽɳʈ]	= DE @RR N T	[dɛəʳɽsɳʈ]	= DE @RRS N T

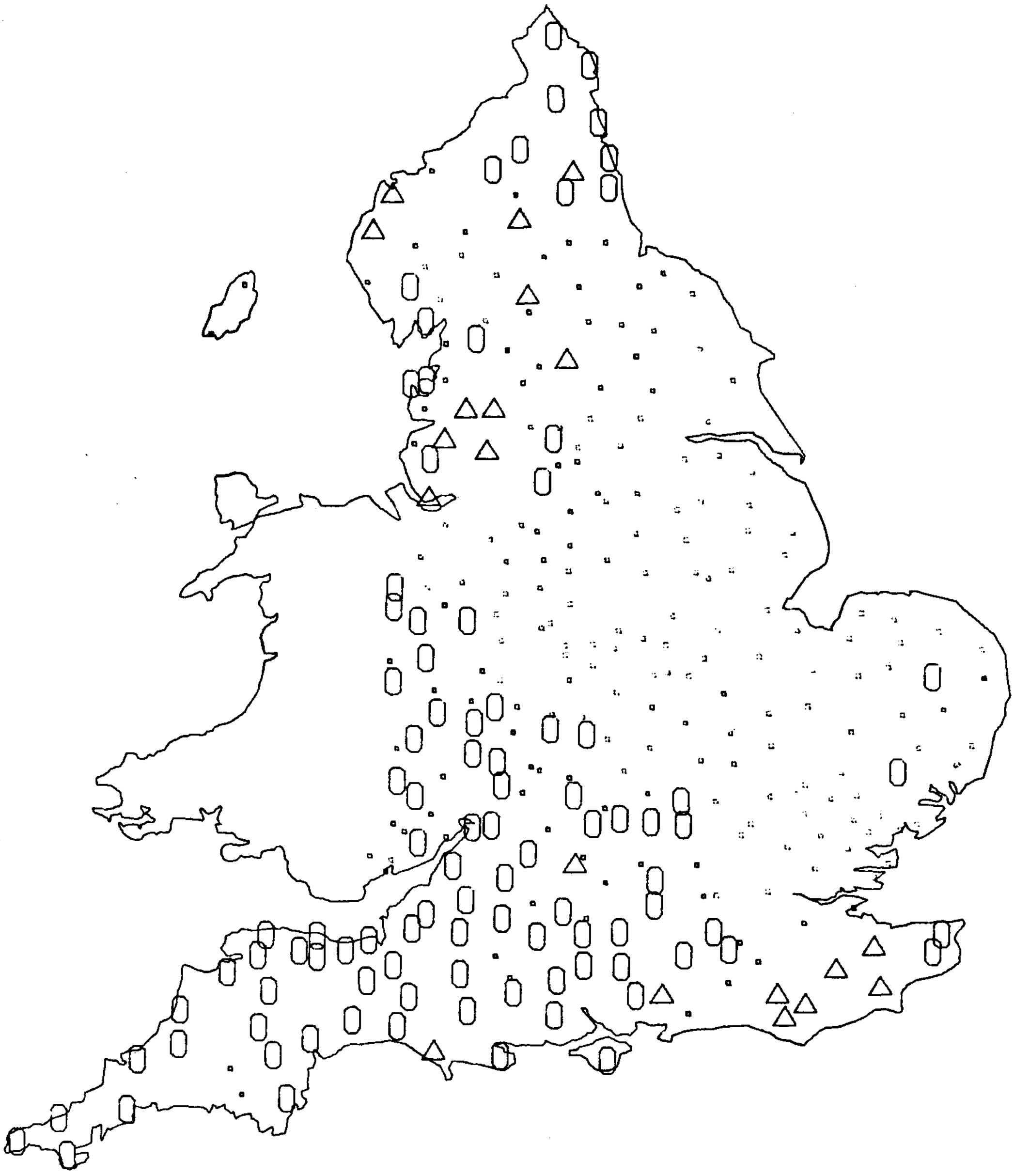
Aligning the forms in this fashion allowed the computer to be easily programmed to sort out any given feature or combination of features with no danger of confusion or ambiguity. But since the forms with blank spaces are a bit difficult to read, they will be closed up in the



MAP 1 NEGATIVE PARTICLE

☆--NO FORMS

○ --N FORMS



MAP 2 R AND R-COLOURING

0--FORMS WITH R-COLOURING

△--FORMS WITH CONSONANTAL R

citations given in the rest of this paper, with the added convention that when R indicates *r*-colouring and when [ə] appears as a superscript in the original records, they will be indicated by a raised R and @ respectively. Thus the forms given above would be cited as follows:

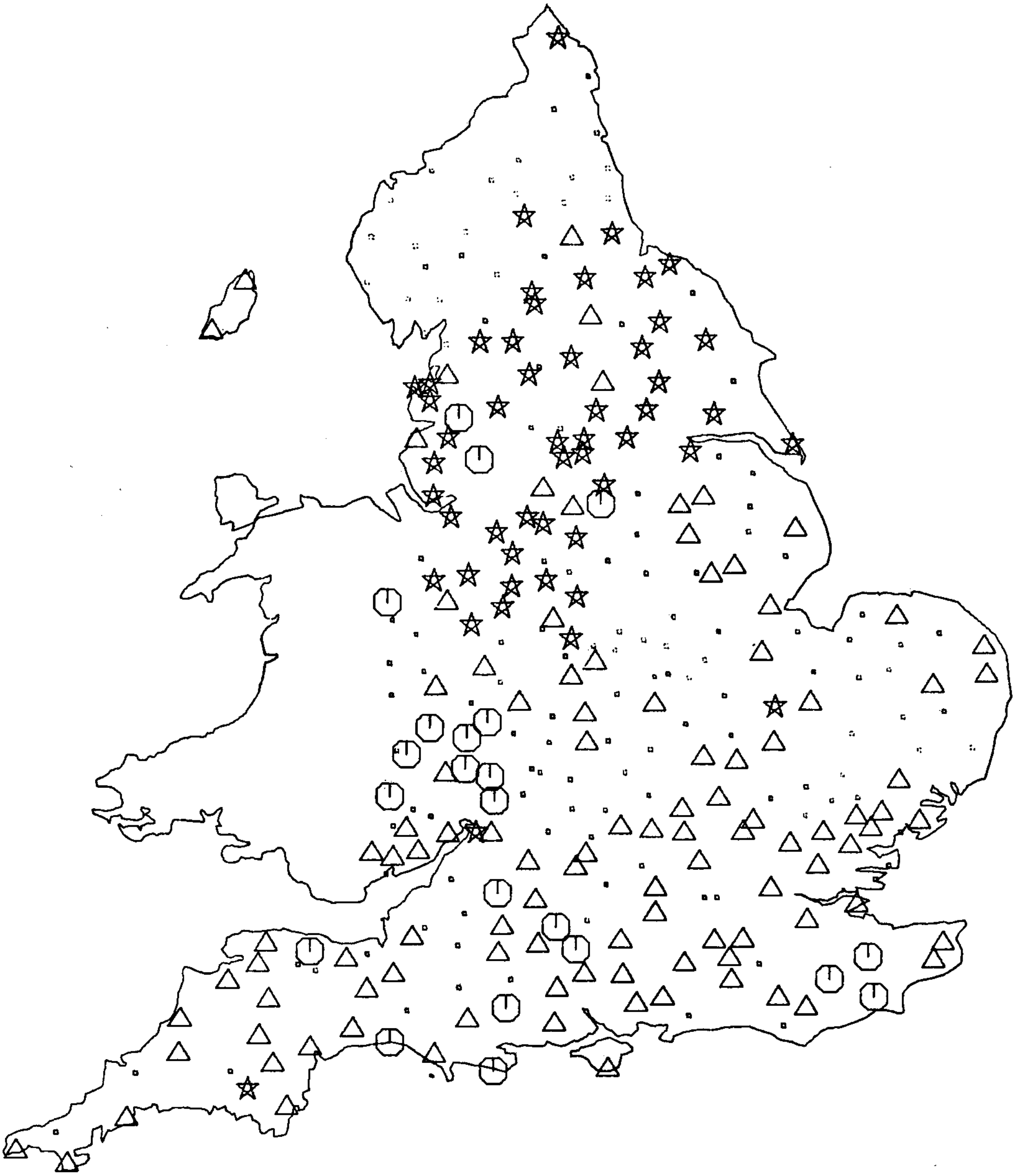
0101	DA:^{R}N@	DO:^{R}SNT	0606	DA:R@NT	DUSNT
0306	DA:DNT	DUSNT	1107	DE:@^{R}:DN@	D@:^{R}DN@
0503	DE@DNT	DA:^{R}SNT	4004	DE@^{R}RNT	DE@^{R}RSNT

The computer sorting produced a great deal of information of varying degrees of interest. I have selected the following points for discussion here, though they do not necessarily exhaust the interesting facts derivable from this set of data:

1. Form and distribution of the negative particle.
2. Distribution of localities showing *r*-colouring or consonantal R in one or both forms.
3. Distribution of localities where informants gave identical responses for both questions—
    - *a.* present forms
    - *b.* preterite forms
    - *c.* mixed forms.
4. Distribution of stem vowels.
5. Distribution of S in slot 10.
6. Distribution of Z and D in slot 10.

On *a priori* grounds we might expect patterned geographical distribution in items 1, 2, and 4, which deal with features more or less subject to regular phonological or morphological development. In items 3, 5, and 6, on the other hand, the operative factor is more likely to be analogy or levelling, and the geographical distribution less clearly patterned. This is in general what we find.

For those who like their isoglosses neat and consistent, the negative particle is most satisfactory. The alternatives involved are, in the computer notation described above, N@, NT$\sim$@NT, and N (presumably syllabic). The distribution of N@ agrees almost exactly with that shown in the responses to IX.5.2, *he doesn't,* and IX.7.10, *she isn't:* it occurs in a clearly defined area in the West Midlands, including Cheshire, Derbyshire, Shropshire, and northern Hereford (see Map 1).[17] In this area the enclitic negative derives from the OE *ne* rather than from the newer *not.* Forms with syllabic N are not so compactly localized, though 22 of the 28 localities reporting present forms with N are south of the Thames and none are in the North (Map 1). Since they all (with the single exception of 0704) occur in NT



MAP 3 ETYMOLOGICAL PRESENT

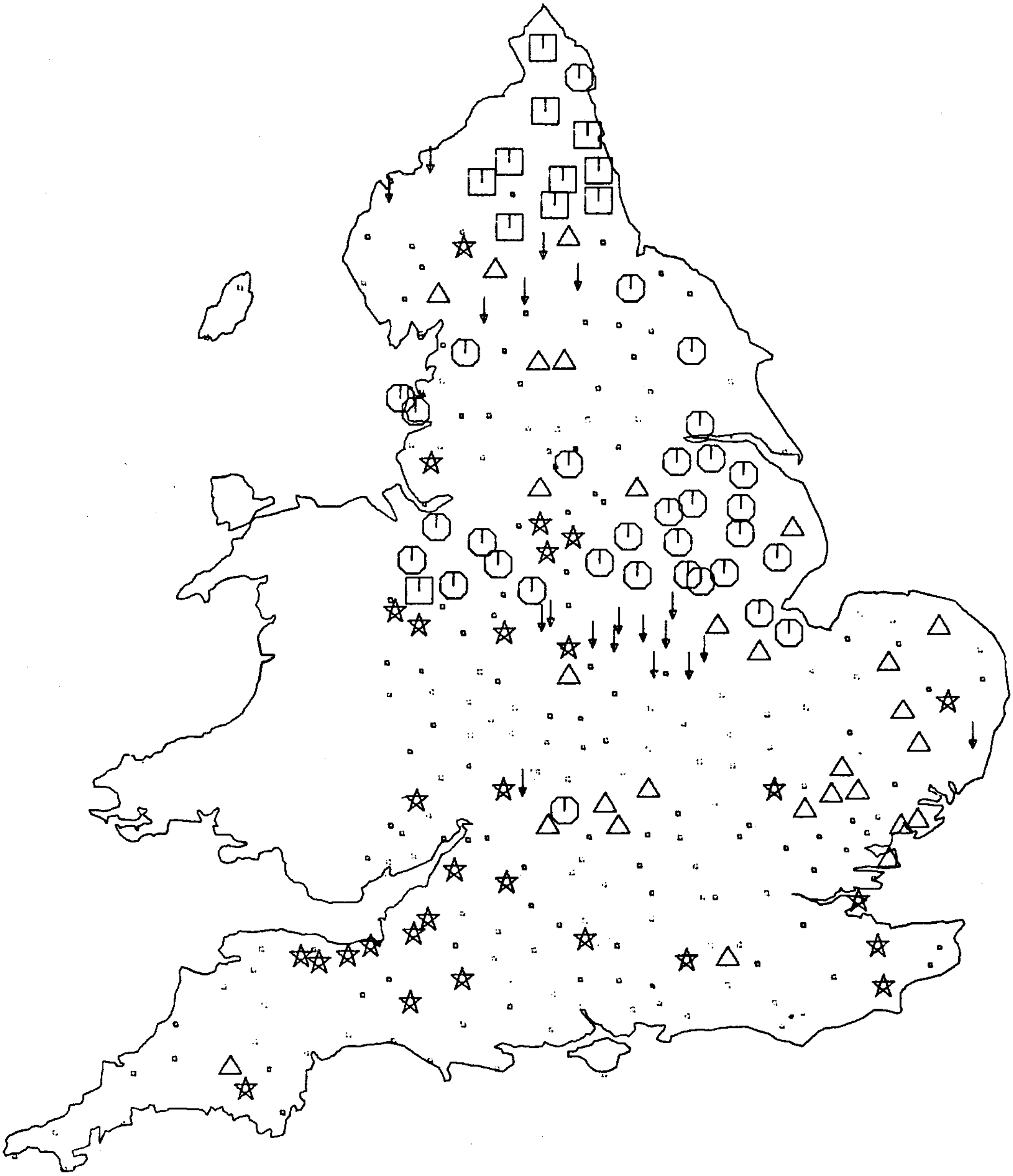
☆--FORMS WITH A

△--E FORMS; ⏀--3, © FORMS

rather than N@ territory, N may be assumed to result from dropping the final T in clusters like RDNT, SNT, or DNT, rather than from loss of final @. Concentration of these forms in the South and especially the Southwest is paralleled in the responses for *she isn't,* for which the standard form of the particle is N throughout Cornwall, Devon, Dorset, and southern Somerset. For *he doesn't,* on the other hand, only three forms in N are reported, all from southern Somerset (3108, 3109, 3113). The difference is probably to be accounted for by the fact that the prevailing form of *he doesn't* in this region is some variation on *he don't,* the final cluster of which is not complex enough to cause loss of final T.

The distribution of *r*-coloured vowels and diphthongs and of consonantal R also shows the expected regional patterning. In general, they occur in the North, except for Westmorland and the East Riding, and southwest of a line running southeast from the Welsh border in northern Shropshire, skirting south of London and across Kent (see Map 2). Since the distinction between *r*-coloured vowels and post-vocalic R is phonetically a delicate one on which fieldworkers cannot be expected to be uniform, these two features can hardly be separated, but for what it is worth we may note two foci of consonantal R, one in southern Lancashire and the other in Sussex and central Kent. In any case, no special conclusions with regard to the presence or absence of *r*-colouring and consonantal R in these words are indicated; they occur just where we would expect them in words having etymological /r/, and are replaced by a central off-glide or vowel length or both in the appropriate *r*-less areas.

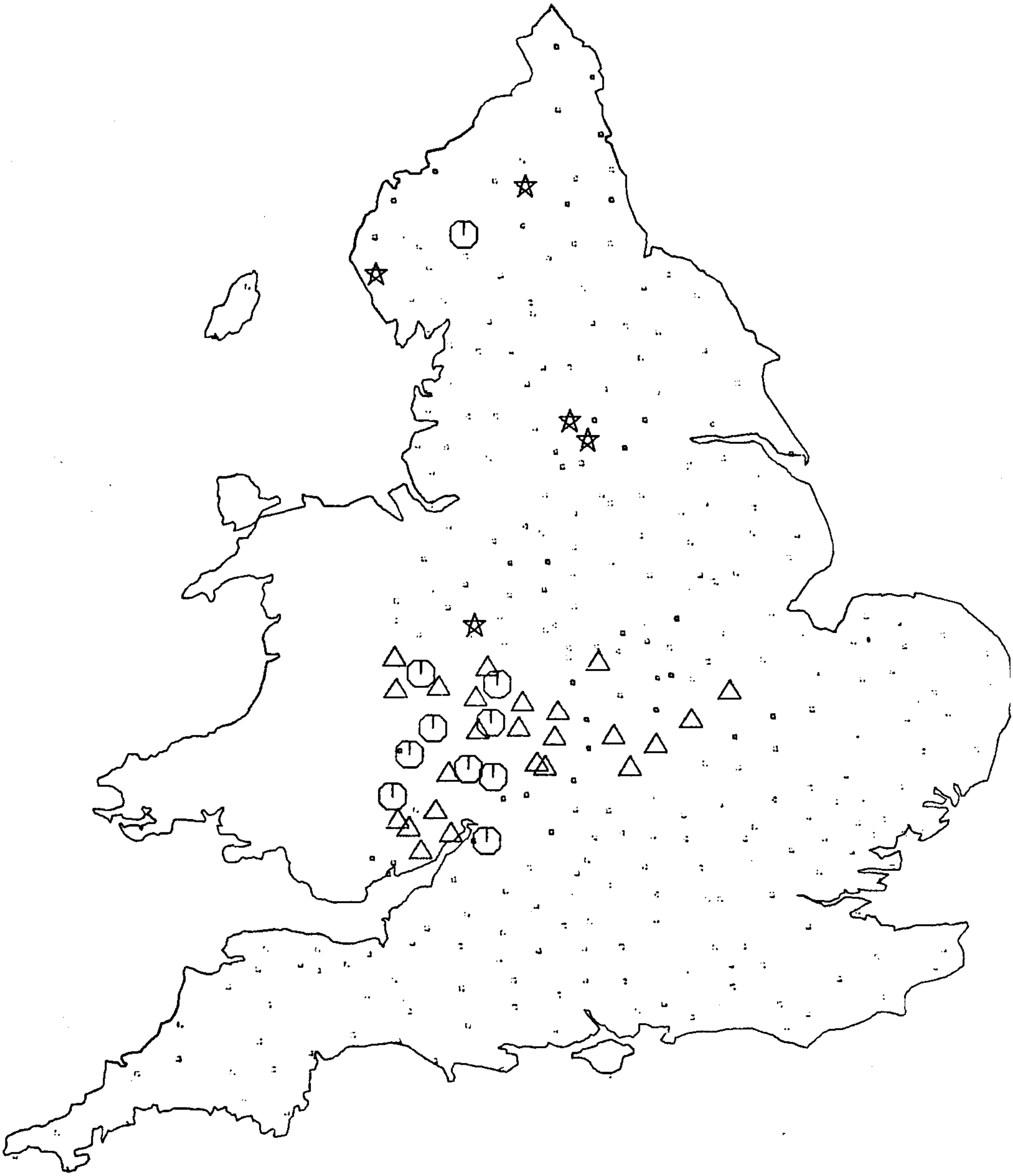
Before we can look at the distribution of the stem vowels, we must take account of the fact that in more than half the localities the responses to both questions were identical or differed only in non-significant phonetic details. In 73 cases it seems to be the preterite that has been extended to the present, since they have either S or D, which must be considered as preterite markers, the first deriving from the historic preterite *dorste, durste,* and the latter from a new weak preterite of the general form *dared.* In 88 cases, on the other hand, no S or D is present, so we may conclude that the present form has been extended to the past. But analogy has been at work in other ways as well. Forms such as DA:SNT (0621), DASNT (1308), DA:SN@ (0806), and DA:^{R}SNT (0501, 0502) for both present and past show the vowel of the present and the S of the past, while forms like DURNT (0203), D3:^{R}RNT (0508) and D@:^{R}NT (3105, 3803) show the vowel of the preterite without the S. These blends seem to indicate a confusion as to the stem of the verb when the present and preterite fall together. But on the whole the levelled forms (if indeed they are that, and not simply the result of



MAP 4 ETYMOLOGICAL PRETERIT

○ --O FORMS; □ --O: FORMS; ↓--U FORM

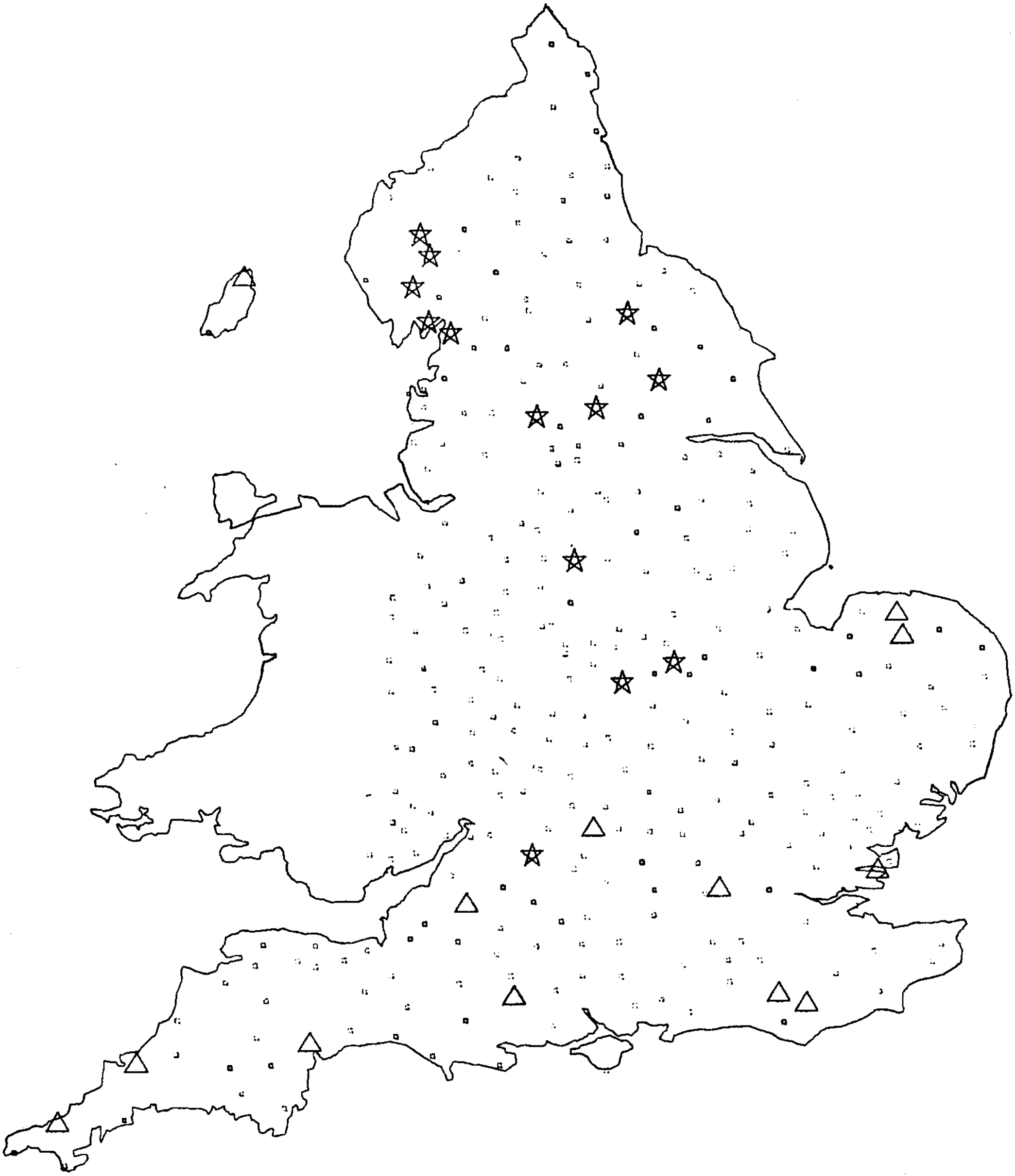
△--3, @ FORMS; ☆--3:, @: FORMS



MAP 5 ANALOGICAL PRETERITS

☆--FORMS WITH A:

△--E:, E@ FORMS; ⦶--3:, @: FORMS



MAP 6 BLENDS

☆--FØRMS WITH A:, A

△--FØRMS WITH E:, E©

misinterpretation of the question, as suggested above) remain etymologically consistent, with back vowels U and O and central @ and 3 appearing with S, front vowels E and once I with D in the South and A with D in the North, and E or A when neither S nor D is present.

No particularly significant regional patterns of levelled forms seem to appear; the localities reporting them are intermingled among those having two distinct forms. It is possible that the same kind of mingling might occur even within the same village. But there do seem to be some regional favourites for the levelled form when it does occur. Thus in Northumberland and again in Lincolnshire and Nottinghamshire the prevalent levelled form is the preterite DO:^{R}SNT, DO:SNT, etc., while in the intervening area of Yorkshire it is the present DA:NT, DA:^{R}NT. In the Southwest, the Home Counties, and East Anglia the preferred levelled form is the present DE:NT, DE:^{R}NT, etc., which is in effect the standard present *daren't* extended to the past. But there is very little regional rhyme or reason for the levelled forms; they are one of the clearest indicators of the confusion that prevails in this decaying modal.

Points 4, 5, and 6 above—the distribution of stem vowels and of post-vocalic S, Z, and D—can best be taken together. On the basis of these features we can divide the forms into four main groups, with sub-groups in each—

1. Etymological forms:
   a. In the present, those having no consonant except the regionally predictable R before the N, and with stem vowel E or A.
   b. In the preterite, those having S and a central or back vowel, O, U, 3, @.
2. Analogical forms:
   a. In the present, those having Z and stem vowel A or E.
   b. In the preterite, those having D and stem vowel A or E.
3. Levelled forms:
   a. In the present, those of form 1*b* or 2*b*.
   b. In the preterite, those of form 1*a* or 2*a*.
4. Blends:
   All forms not conforming to 1*a*, 1*b*, 2*a*, 2*b*.

Etymological Forms. I have so named these because they can be considered direct descendents of the OE *dearr, darr, dorste, durste.* Clearly, present forms like Yorkshire DA:NT, Derbyshire DA:N@, Essex DE:@NT, and Devon DE:@^{R}:NT are of this sort. The stem vowels show rather clear-cut regional distribution, with A: and A in the

North and NW Midlands, E: and E@ scattering through the rest of the Midlands and dominant in the Home Counties, East Anglia, and the South (Map 3). A cluster of forms in 3: or @: in the SW Midlands, with similar forms scattered across the South from western Somerset to Kent, presents a problem to which I will return. Scattering forms in E: through the North may be attributed to the influence of standard English, but it is hard to account for isolated forms in A: in Rutland (1901), Gloucestershire (2406), and Devon (3710).

Etymological preterites show vowel variation which presumably goes back to the OE variation between *dorste* and *durste*. Thus the prevailing vowel from Lincolnshire and north Cheshire is O, with O: in the far North, while the South Midlands and South have 3, 3: or @ (Map 4). Scattered 3 and 3: forms in the North Midlands and North are attributable to the influence of standard *durst*. There is a focal area of forms in U in Leicestershire and a few others appear in NW Yorkshire and in Cumberland.

Analogical Forms. These are so called because they seem to represent morphological alignment of modal *dare* with the weak verb paradigm rather than the preterite-present pattern; i.e. a 3rd singular present *dares* and preterite *dared* (with appropriate regional variation in stem vowel), as is the case with the full verb *dare*. In the present, the analogical forms should show Z, since S must in virtually all cases be considered a levelling of the S of the preterite. Present forms in Z are very rare, there being only five recorded in the whole country, only three of which can be unequivocally considered as analogical forms: 1201 DA:ZN@, 0609 DAZ@NT, and 3104 DI@^{R}Z NOT. The second and third of these are levelled into the preterite; the first has the etymological preterite D3:SN@. At 1208 both the present and preterite forms are D3:ZNT: this is probably a levelling of the preterite with voicing of the S; similar voicing in etymological preterites occurs at 0507, 0602, 0611, 0625, and elsewhere. At 2201 the recorded form is actually [dʌznt], which is nearly identical with three of the four remaining Suffolk forms, [dʌsnt], probably best considered as levelled preterites. Since the preterite form at 2201 is DE@NT, this is an example of cross levelling (or perhaps of total confusion in the informant!). Two more forms which may be analogical presents with devoiced Z are 0109 DA:SNT (preterite DA:DNT) and 1506 DE:SNT (preterite DE:DNT).

Analogical preterites are somewhat more frequent than the presents: there are 29 clear cases, four of them scattered in the North and the rest concentrated in a triangular area with its base on the Welsh border and its apex in Nottinghamshire (Map 5). Once again, as with the present forms, there is a concentration of forms with stem vowel @ in the SW Midlands. In both cases it seems to me that two interpretations are possible. If the vowel is considered to be an unrounding and centring of the U of the preterite and thus identical with the prevailing vowel of the etymological preterite in the South and East, then these forms are blends. If, however, the vowel is considered a retracting of E, the characteristic vowel of the present in this region, the presents are etymological *(daren't)* and the preterites are analogical *(daredn't)*. The latter seems the more likely explanation to me.

Levelled Forms. These have been discussed above at some length. But the discussion there concerned only those cases where the two responses were identical. There are further cases where either the present or the preterite form, or both, are levelled but not identical with the other form. Thus in thirteen localities an analogical preterite form appears in the present, coupled with an etymological preterite or a blend. Examples are 0201 DA:DN@ DURSNT; 0306 DA:DNT DUSNT; 0204 DA:DNT DA:SNT; 2601 DE:@DNT D@SN? An example of cross levelling at 2201, where the cited present form is morphologically preterite and the cited preterite morphologically present, has been given above. There are at least eight others, including 1902 DE:@DNT DE:@NT; 0604 and 0620 DOSNT DA:NT; 1707 DUSNT DE:RNT. In the light of the possible confusion about tense discussed above in the analysis of the questions, these mixed forms are perhaps not to be taken very seriously.

Blends. If we exclude the SW Midland presents and analogical preterites in @ (see above), the blends, with one exception, represent extension of the vowel of the present into the preterite, with retention of the etymological S of the preterite. There are 24 of these, 12 with stem vowel A or A: and 12 with E or E: (Map 6). The vowels are distributed as they should be—A in the North and E in the South—with one exception, an anomalous DA:SN at 3201. The present form at this locality, DE:RN?, shows the correct regional vowel. There is one example of a blend of the opposite sort—an extension of the preterite vowel into the present: 0203, where both present and preterite are DURNT.

What conclusions are to be drawn from this exceedingly complicated and confused situation? One, undoubtedly, was suggested early in this paper: it is difficult to elicit with accuracy grammatical forms as deeply involved in the syntactic and semantic fabric of the language as the modal auxiliaries are. The difficulty is compounded when another grammatical feature, tense alternation, is also sought. How accurately the first-response citations given in answer to questions IX.4.17/18 reflect actual usage of the informants could only be decisively settled by a more intensive survey, preferably one in which the forms were caught in actual use rather than as responses to questions. The discussion here has taken no account of what might be the most accurate revelation of actual usage: the secondary responses and incidental forms which the fieldworkers occasionally record.

On the assumption that the data do reflect actual usage in at least a majority of the localities, we are justified in another conclusion: that the modal *dare* is in a very unstable state morphologically, which is perhaps partly a consequence of its position on the periphery of the modal system. The particular confusion about tense is not, after all, restricted to *dare* or to the present day. It must have been a somewhat similar confusion in the Germanic past which caused the preterites of so many of the modals to move into the present. In fact, there seems to be something in the semantics of the modals that encourages moving past forms into the present—perhaps a conflict or overlapping of the notion of contingency conveyed by modality and the notion of remoteness conveyed by past-marking. At least two of the "new" weak preterites—*should* and *might*— are undergoing this second preterite-present shift in modern English. In any case, this seems to be an area where dialectology, to which Harold Orton has so notably contributed, can supply information of value to other branches of linguistics.

NOTES

[1] Harold Orton and Wilfrid J. Halliday (eds.), *Survey of English Dialects, The Basic Material. Vol. I, The Six Northern Counties and the Isle of Man* (Leeds, 1962).

[2] A. Campbell, *Old English Grammar* (Oxford, 1959), §144, n. 1.

[3] Madeline Elizabeth Ehrman, *The Meanings of the Modals in Present-Day American English* (The Hague, 1966), p. 96. Further evidence on the status of the negative preterite in standard English under various forms of elicitation will be found in two papers by Randolph Quirk: "Co-existing Negative Preterit Forms of *Dare*" and "Acceptability in Language," both reprinted in his collection, *Essays on the English Language: Medieval and Modern* (London, 1968).

[4] Martin Joos, *The English Verb, Form and Meanings* (University of Wisconsin Press, 1964), p. 192.

[5] W. F. Twaddell, *The English Verb Auxiliaries*, 2nd ed., rev. (Brown University Press, 1963), p. 13.

[6] Twaddell, *op. cit.*, p. 22.

[7] For statistics on the frequency of modal and quasi-modal *dare* in the million-word Standard Corpus of Present-Day Edited American English prepared at Brown University, see J. Svartvik, "Plotting Divided Usage with *DARE* and *NEED*," in *Studia Neophilologica*, 40: 130-40 (1968).

[8] Joos, *op. cit.*, p. 153.

[9] Ehrman, *op. cit.*, p. 76.

[10] In re-examining my own field records from Norfolk, I find that I recorded a following verb in six out of twenty-four cases, e.g. [ˌdɑːsn ˈgou] from 2112. But I cannot be sure that failure to do so, in my practice or that of the other fieldworkers, always means that there was no following verb in the response. In any case, following verbs are not reported in the printed volumes of *SED*.

[11] Note that it nicely distinguishes auxiliary *do* from the full verb: *I came to the meeting but he didn't* but not **I did my work but he didn't his.*

[12] The localities are 2505, 3208, 3303, 3304, 4003 (in all citations in this paper the first two digits indicate the county and the last two the locality, as in the list on p. 31 of the Introduction to *SED*). No responses were obtained from 2108 and 2606.

[13] The localities are 2506, 2912, 3203, 3207, 3301, 3402, 3404, 3503, 3907, 4001, 4002, 4006.

[14] All the forms have been taken directly from the field records of *SED*. I transcribed about two-thirds of them myself in 1956-57, when I was at Leeds University as a Fulbright Senior Research Fellow. Those from the six northern counties I have verified from the printed list in Part 3 of Vol. 1 of *SED*. The rest were kindly transcribed for me by members of the *SED* staff: Robin Brown, Philip Tilling, and especially Stanley Ellis, the editor of the present volume. It is a pleasure to record my gratitude to them and to the whole staff of the Survey, who have always been most co-operative and helpful. This is perhaps the appropriate place also to acknowledge my debt to Harold Orton, without whose friendly encouragement and co-operation my work in English dialectology would not have been possible. I am happy to be able in some part to repay my debt by this modest contribution to his birthday volume.

[15] I am indebted to Gerald M. Rubin, staff programmer of the Department of Linguistics of Brown University, for the programming on which the following discussion is dependent. The work was done under his direction on the IBM System 360 computer at the Brown University Computing Laboratory.

[16] As I have shown elsewhere ("A Modified System of Phonemic Transcription for One Idiolect of English," in *Papers in Linguistics in Honor of Léon Dostert* (The Hague, 1967), pp. 37-45), the syllabicity of /n/ is predictable from the context in any case.

[17] The maps used in this article were produced directly from the data by the Cal Comp plotter in connexion with the Brown University System 360 computer. So far as I know, this is the first time that dialect maps have been made in this fashion. Credit is due to Gerald Rubin, whose ingenuity and perseverance as a programmer made these maps possible.

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